

ALL HANDS

MAGAZINE OF THE U.S. NAVY

MAY 1986



'Top Gun' Tomcat
Page 20

USS Iowa (BB 61)
launches a Harpoon
anti-ship cruise missile
during FleetEx 2-86.

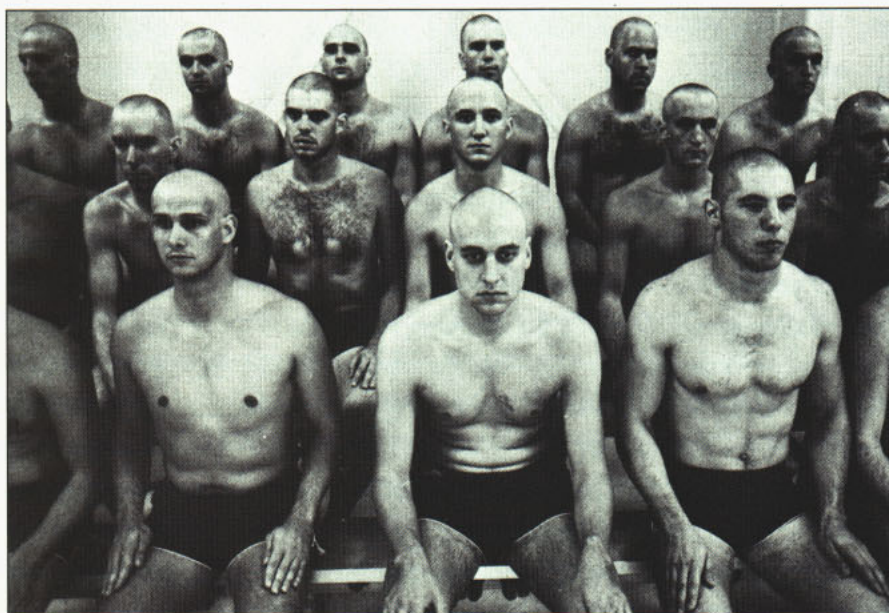


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63rd YEAR OF PUBLICATION



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Front Cover: F-14 *Tomcat* from VF 124 serves as backdrop for Paramount Pictures' "Top Gun," shot on location at NAS Miramar.

Back Cover: Quote from commentator George Will superimposed on the painting "Hook down, wheels down," by James Scott, from the Navy Art Collection.

Navy Currents

Trost nominated as CNO

President Ronald Reagan recently announced Adm. Carlisle A. H. Trost as the nominee for Chief of Naval Operations to succeed Adm. James D. Watkins. Trost's nomination must now be approved by the U.S. Senate. The change of command will be held June 30th at the U.S. Naval Academy, Annapolis, Md.

Trost, now commander in chief, U.S. Atlantic Fleet (CinCLantFlt), is a 1953 graduate of the U.S. Naval Academy and has served on numerous submarines, including command of the nuclear-powered ballistic missile submarine *USS Sam Rayburn* (SSBN 635).

Of Adm. Trost, Adm. Watkins said, "He has the breadth of experience and the record of professional performance required to pilot the Navy in the challenging days ahead." □

Navy Relief

The Navy Relief Society fund drive is on.

The society, run by 3,800 volunteers at more than 220 offices worldwide, helps active duty and retired Navy and Marine Corps enlisted people and their families. Services offered include emergency financial assistance, visiting nurse programs, guaranteed student loans, interest-free loans or grants, and thrift shops.

Navy Relief won't help you out of a financial mess because you neglected to pay your bills or want some extra money for liberty or leave. It will not help pay your fines or other legal expenses, car licensing and insurance. It will, however, help you with setting up a budget, and financial counselors can help you in many ways.

If you've had help from Navy Relief in the past or might need help in the future, you can return that help through your contributions. The society's six-week fund raising drive is nearly over, but you can contribute anytime during the year; see your local Navy Relief coordinator. □

Aviation changes

A recent message details changes in naval aviation programs to begin as soon as specific instructions and notices hit the streets. Included in the changes, according to All Navy message

060/86 of May 1986, are a new officer designation, the reinstating of two programs, a new obligated service option and a vision waiver.

An aviation duty officer restricted line community with a 154X designation will be implemented. Officers in this designation will be eligible for promotion up to captain but will not be eligible for flag rank.

Two returning programs are the naval aviation cadet and the reserve officer candidate programs.

For further information, contact Lt.Cmdr. Harry Allen, code OP 130E40C, autovon 224-5631 or commercial (202) 694-5631. □

Reform in Retirement Pay

Military retirement pay will be reduced if either of two bills—one in the Senate and the other in the House of Representatives—is passed. The bills will not affect people now under military obligation, but will have a negative impact on future retention, according to Assistant Secretary of Defense (Force Management and Personnel) Chapman B. Cox.

Under the present military retirement system, people with 20 years of service can retire and retain 50 percent of their basic pay. The bill in the Senate will reduce the 20-year retirement benefit to 44 percent, and the one in the House will reduce it to 40 percent. The Senate bill is considered to be the less damaging to the management of the military force, according to Cox. The Senate also has proposed a reduction in the annual cost-of-living adjustment for retirement pay. The Senate and the House will meet soon to settle their differences.

"The compensation package introduced to Congress doesn't meet a comparable standard for the private sector," Cox said, "but it's close." An annual 4 percent pay raise for military retirees has been proposed, to keep that gap from increasing.

"The fact that we now expect changes to our retirement system for future entrants should not be taken as any indication that we have withdrawn from our firm commitment to work to provide our military members the best compensation and quality of life possible," Cox said. □

Shipboard pregnancy policy

Pregnant Navy women aboard ship can stay on that ship for up to the 20th week of their pregnancy and need no longer transfer immediately from their sea duty assignments. This was set forth in a new Navy policy that came out in March.

OPNAV Instruction 6000.1 is a single-source reference for the new policy. Info covered includes counseling requirements, assignment policies (including shipboard and overseas duty), and definitions of light duty, convalescent/maternity leave and work limitations.

The new policy does not override the special care a pregnant woman must take in order to protect her health and the health of her baby.

COs will retain pregnant sailors aboard ship up to the 20th week, with medical officer concurrence. The pregnant member is required to be temporarily or permanently transferred ashore before any underway period. Previous policy required the mandatory removal of women from ships upon confirmation of pregnancy. □

Mutual Aid Association

The more than 100-year-old Navy Mutual Aid Association is a non-profit, tax exempt voluntary association that benefits sea service people and their families through a variety of services.

Low-cost life insurance, financial counseling and giving aid in gaining federal benefits and allowances to which sea service members and surviving family members are legally entitled are just some services offered by the association.

In addition, the association's volunteer staff provides commanders and commanding officers with briefings on government Social Security, dependency and indemnity compensation, and survivor benefit programs.

Active duty members in the Navy, Marine Corps and Coast Guard and officers of the U.S. Public Health Service and the National Oceanic and Atmospheric Administration may apply for membership while on active duty or within 120 days after separation. For further information, call toll free 800-628-6011 (in Virginia call collect (202) 694-1638). □

ALL HANDS

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The P-3 Orion

Graduate school

The offices of Patrol Squadron 30 are set up much the same as those occupied by the five other squadrons in the pentagon-shaped hangar at NAS Jacksonville, Fla. VP 30 has all the normal administrative, operations, safety, maintenance and command master chief spaces, but there are some major differences. VP 30's special mission allows the squadron twice the number of P-3 *Orions* and people of an operational squadron; VP 30 has 18 P-3 *Orions* and more than 700 personnel. The special mission? To train the people needed to run the other patrol squadrons on the Atlantic coast.

As the East Coast P-3 Fleet Replacement Squadron, VP 30 trains flight crew members in anti-submarine and anti-surface warfare, search and rescue, mining, and maritime operations. Those personnel then serve in the 12 P-3 squadrons stationed in Jacksonville and Brunswick, Maine.

Training all these people in such complex systems takes time—but not much. VP 30 churns out a 12-man flight crew in 19 weeks. The squadron supports a 250-student rotation every six weeks, with nearly 3,000 flight crew and maintenance students graduating annually.

All P-3 crew members get ground,

simulator and flight training, except the inflight technicians, who spend most of their training time learning to maintain the highly sophisticated equipment.

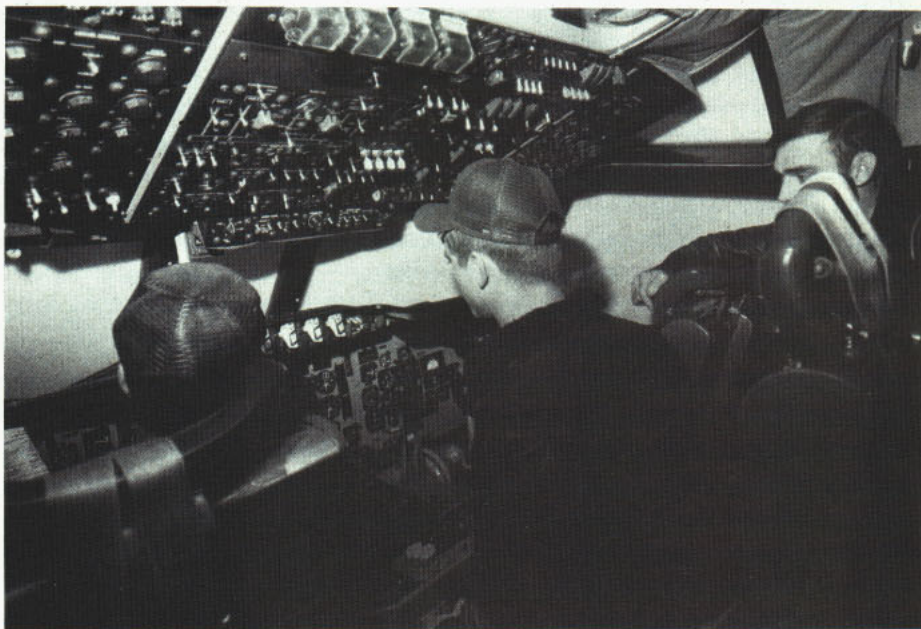
Teamwork is the key to effective operations in all Navy units, and VP 30 is no exception. But at the “P-3 graduate school,” the varied backgrounds of the student crew members and the separate training programs they undertake places an extra emphasis on teamwork when the time comes to form a single crew.

A review of the backgrounds and required training of the various crew members highlights the multiplicity of the *Orion* team.

- **Student pilot officers** come from the

Naval Air Training Command, Corpus Christi, Texas, to VP 30's ground school to learn the P-3 aircraft systems. They sharpen their manual flying skills on the *Orion*'s buttons, switches and procedures in the simulator. Finally, they get hands-on experience with training flights in the local area or on operational detachments.

- **Naval flight officer students** are trained by U.S. Navy instructors, using Air Force facilities and simulators, before going to VP 30. At VP 30, they're trained on the complex electrical, tactical, navigational and communications systems of a P-3. NFOs hold two positions on the plane's crew—Navigation/Communications officer (Nav/Comm) and



VP 30 students hone their skills in a P-3 cockpit simulator as instructor (hatless) looks on. Far right: A VP 30 squadron member performs maintenance on port outboard P-3 engine.



Graduate school

Tactical Coordinator (Tacco). On their first tour in Navy patrol squadrons, NFOs are trained as Nav/Comm's—the junior NFO position.

• **Flight engineer students** go through one of the toughest curriculums at VP 30. Enlisted people from various ratings—structural mechanics, electricians, engine mechanics and survival equipment specialists—learn to be systems experts in three different ratings: Aviation Machinist's Mate (AD), Aviation Electrician's Mate (AE) and Aviation Structural Mechanic's Mate (AM). Students spend five weeks with maintenance instructors, getting a basic introduction to the P-3 systems: engines, electronics and hydraulics. Then they share 14 weeks of classroom sessions and P-3 training with the pilots in the cockpit simulators. Flight engineer students receive a Navy Enlisted Classification (NEC) code when they complete their VP 30 training.

• **Sensor operator trainees** come from the aviation anti-submarine warfare sys-

tems operator rating after completing enlisted 'A' school and the air crew candidate school in Pensacola, Fla. These students are trained either as acoustic sensor operators—who listen to and interpret ocean noises picked up by ASW sonobuoys—or as electronic warfare operators—who handle radar, magnetic anomaly detection gear and infrared detection equipment and other electronic support systems.

• **Aviation ordnanceman students** may come from fleet squadrons, P-3 maintenance departments or ships. They learn to program, load and drop sonobuoys, which detect submarines. They also train to troubleshoot weapons and search systems, and to photograph surface vessels. They too receive an aviation NEC code at the completion of training.

• **Inflight technician trainees**—Aviation Electronics Technicians (AT) or Aviation Anti-submarine Warfare Technicians (AX)—come to VP 30 from basic training at Naval Aviation Technical Training

Center, Memphis, Tenn. They learn to maintain all avionics equipment and to monitor the aircraft's central computer systems. They also have two weeks of intensified condensed flight training on emergency drill procedures and flight duty. Inflight technicians also receive an aviation NEC code at the end of training.

These different backgrounds and varied responsibilities of the potential crew members mean that their training must

VP command opportunities

The CNO has approved a reduction in the length of command tours for patrol squadron COs, from 15 to 12 months. This is intended to allow greater opportunities for VP command among qualified candidates. VP pilots qualified for command may wish to contact their VP community placement officer for more information.

With emphasis always on accuracy, students and squadron members learn as they work on P-3s.

Photo by PH2 Shari Dick



follow separate tracks. Fortunately, the flying phase brings it all together, through practice with the other crew members to finally make a team. Instructor pilot Lt. Michael Harte said it's great to watch the 'light bulbs' go on in students' heads when they actually start flying the plane and all their training comes together.

During this final phase of training, some students take weeklong operational flights to detachments in Iceland, the

Azores and Bermuda. Here they practice tracking submarines and conduct anti-submarine warfare.

VP 30 instructors never stop stressing the importance of teamwork. "If any member is not doing his job, the mission could fall apart," said training officer Cmdr. George Hodermarsky. "Without teamwork, the expensive and sophisticated P-3 would be nothing more than a nice airborne platform with windows."

Standardization is also stressed. "With the numbers of people in a squadron and the varying backgrounds, there's no room for creativity or individual freedom," said Hodermarsky. "A pilot who leaves here has to fly like every other pilot because turnover in squadrons is frequent. That's why we push standardization and testing to make sure we're doing it the same way (throughout the fleet)."

A senior instructor serves as a watch-



Graduate school

dog for standardization in the classroom. As VP 30's pilot standardization officer, he sits in on classroom lectures to monitor instructors and ensures that correct terminology is used and that the necessary information is presented. Students are also tested for standardization by their assigned instructor during five familiarization flights, but a different instructor conducts the standardization check on the sixth and last familiarization flight.

"The instructors here have a personal stake in the students," said AE1 Larry Bradley, a flight engineer instructor-under-training. "If you're an instructor and you go through six or eight students and none of those students can make it through the school, then the other instructors will look at you and wonder what's wrong with you, wonder why you can't teach."

VP 30 instructors are selected primarily because they're the top people in their squadrons. "I'm always hearing good things about my instructors," said Hodermarsky. "We have some of the sharpest people in the Navy here. They do well and I expect that. Their real challenge is to be role models for the students. In many cases, it's the first look the students get at fleet people."

Instructors will often take students "under their wing" if they think it's necessary.

"An instructor is always around to answer any questions you may have or to explain something to you," said student Lt. Bob Shea. "Even after working hours, he'll take you out to the plane to explain something further."

In the classrooms, names and home phone numbers of at least three instructors are placed in the corner of the blackboard; students can call any time.

Credit for VP 30's success goes not only to the instructors, for providing a tough training program for students, but

to the people in the maintenance and administrative departments, who keep the squadron operational by maintaining the P-3s and moving the paperwork required on all students and squadron personnel. "In many ways, the support people are the backbone of the P-3 graduate school," Hodermarsky said.

Hodermarsky describes VP 30 as a "graduate school" because of the materials' complexity and sophistication. But VP 30 really just lays the foundation.

"Nineteen weeks may seem like a short time, given the complexity of the aircraft, but the school gives the rudiments of knowledge required and the skills to be safe, and then the (individual's) squadron picks it up from there."

Student flight engineer AMH2 Larry Peterson described his stay at VP 30 as

a constant revolving door of studying, class, sleep, more studying, class and sleep.

"It's really an outstanding program, although it's such an intense one. But it's great when everything clicks in when we're flying," Peterson said. He will be assigned to VP 49 at NAS Jacksonville.

To graduate from VP 30, students must maintain an average grade of 80 percent on all three training evolutions: ground, simulators and flight. But even after they're assigned to an operational squadron, there are more standards to be met.

Flight crew members can qualify in their respective specialties in six to 24 months, but that's not the end of their squadron training. They must pass quarterly and annual Naval Air Training and



Students practice on an older model P-3 in the FRAMP hangar.

Operating Procedures Standardization (NATOPS) program tests, annual flight physicals, swim qualification tests, low pressure night vision tests every four years, and deep water environmental survival tests every eight years.

Even after students plow their way through 19 weeks of complex systems training in the P-3, and maintain their qualifications once they're in squadrons, their education isn't over. System upgrades, new technology and new equipment all require aviators to learn quickly and accurately, and this way of life—continually learning and re-learning—defines the special mission of VP 30. □

—Story and photos by Candace Sams



FRAMP: VP30 maintenance

A lot of training and expertise is required to successfully operate the P-3 *Orion*. But, as P-3 veterans like to say, before you can work 'em in the air, you have to *get* 'em in the air—and then you have to *keep* 'em in the air. That's where the maintenance personnel fit into the P-3 picture. And when you're talking P-3 maintenance, you're talking FRAMP.

Maintenance training at the VP 30 FRAMP (Fleet Readiness Aviation Maintenance Personnel) building prepares people to serve in East Coast P-3 *Orion* squadrons. FRAMP teaches 17 independent courses to the 200-250 students on board at any one time. Last year, nearly 1,600 students went through FRAMP.

Unlike the P-3 flight crew's 19-week training period, maintenance training course lengths vary with the amount and type of training needed in any given rating. Those ratings are: Aviation Machinist's Mate (AD), Aviation Ordnanceman (AO), Aviation Structural Mechanic (Equipment) (AME), Aviation Structural Mechanic (Structures/hydraulics) (AMS/H), Aviation Electrician's Mate (AE); Aviation Electronics Technicians (AT) and Aviation Anti-submarine Warfare Technician (AX).

A student comes to FRAMP after recruit training and fundamentals training at Naval Aviation and Technical Training Command, Memphis, Tenn. At FRAMP, students begin specialized training in their rating. All students start with classroom introductions to the P-3 *Orion*. Next comes classroom instruction on the P-3 systems. Students then go back to FRAMP to perform actual hands-on training on the P-3s. After completing these training phases, a student transfers to an operational squadron.

To ensure a quality maintenance training program, FRAMP implemented the

Maintenance Training Improvement Program in 1983 for East and West Coast squadrons.

Through a student's test results, MTIP can uncover deficiencies in FRAMP's 17 different pipeline courses and in the actual squadron work centers. People can be measured on their level of expertise on an aircraft or aircraft system, and can identify specific training requirements for a person or squadron.

MTIP also can uncover training deficiencies in squadrons as well as in 'A' schools and the Naval Aviation Maintenance Training Group Detachment.

As the MTIP model manager for P-3 squadrons, FRAMP develops and maintains all course material and question data banks, and provides instructors for formal classroom and hands-on training. FRAMP also provides training for other Navy facilities such as the Naval Air Development Center, Warminster, Pa.; Naval Air Test Center, Patuxent River, Md.; and Naval Engineering Support Units, in Brunswick, Maine; Jacksonville, Fla., Moffett Field, Calif., and Barbers Point, Hawaii. After training, though, testing still continues once a person transfers to a squadron.

Before a squadron goes on deployment, FRAMP provides a training package to squadrons based on the squadron's testing and evaluation results.

The maintenance person's No. 1 priority is maintaining the P-3s safely. But since new equipment and systems are always planned for in the future, maintenance personnel are forced to learn and re-learn quickly and accurately, just like flight crews.

The maintenance people may be the only members of the P-3 team who never fly, but without them, nobody gets off the ground. □

AOCS

In like a lamb Out like a lion

It is two minutes before five o'clock on this Tuesday morning. Most of the people assigned to Pensacola Naval Air Station are still asleep. One notable exception is Marine Corps Gunnery Sergeant Robert Calamari. That in itself is not very significant. But for the 37 new aviation officer candidates who are enjoying what may be their last restful sleep for quite a while, an awakened Calamari is enough to ruin their whole day.

Calamari and a small group of candidate officers (aviation officer candidates in their last week of training) climb the stairs up to the second deck, careful not to make any noise. Huge metal trash cans are raised above heads and—CRASH—the cans tumble to the deck.

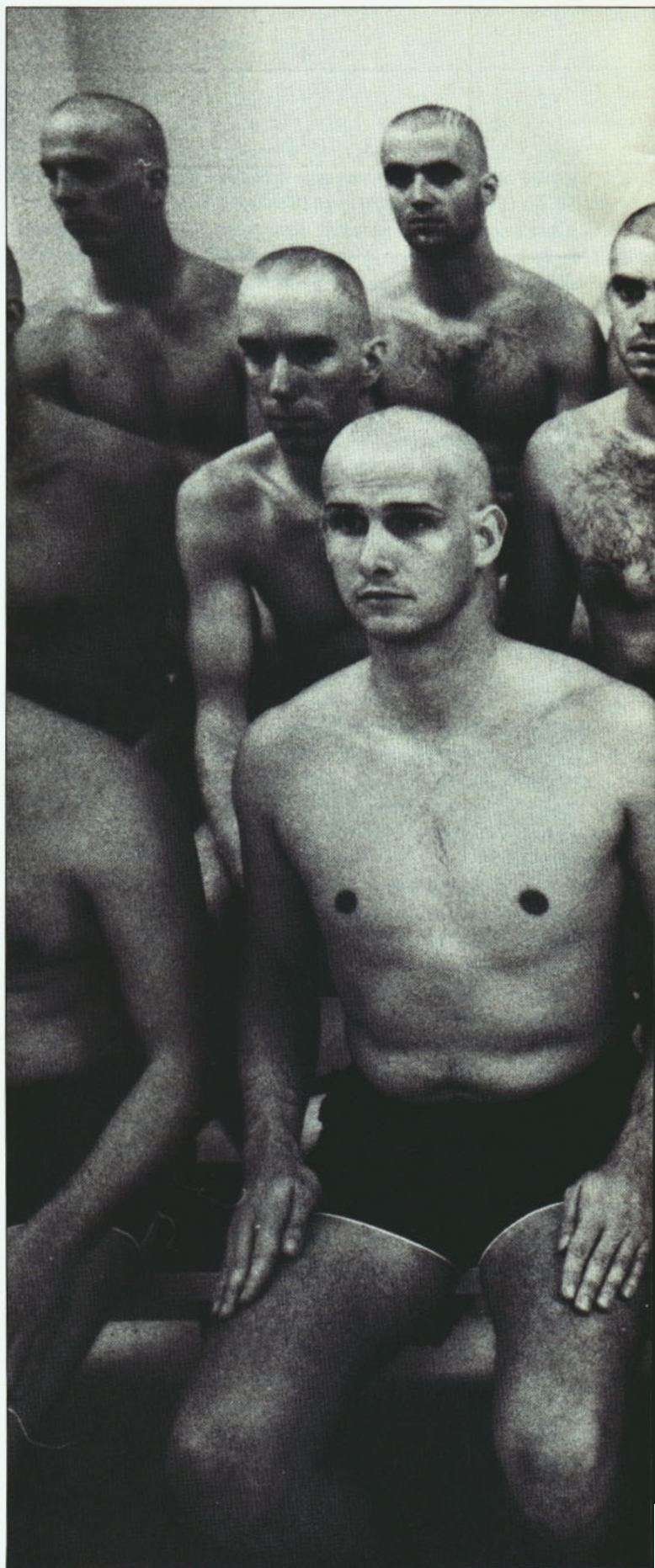
It is now five o'clock.

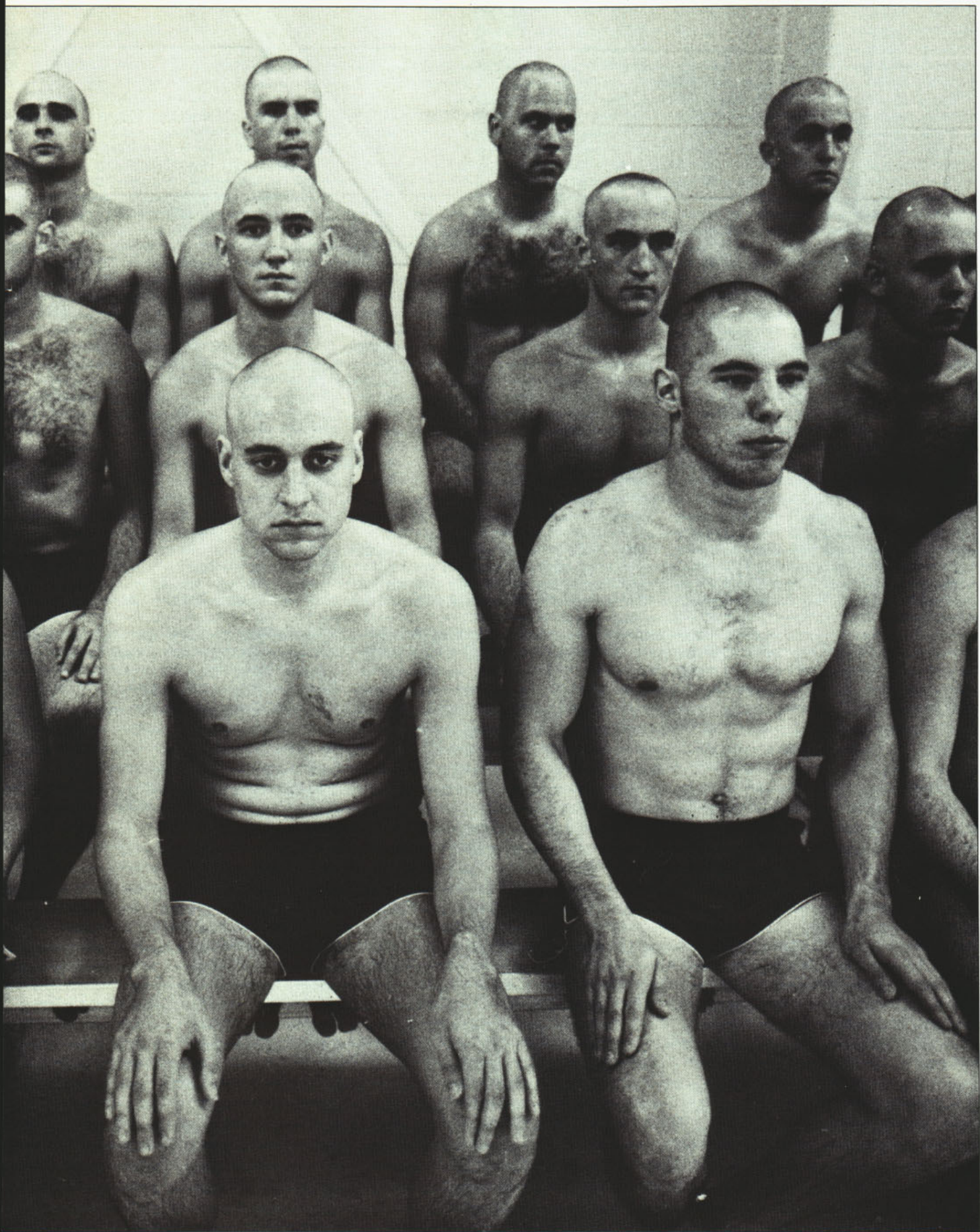
Today is the first day of training for class 06-86. There are only 95 more days to go. If they last, these 37 aspiring aviators will become commissioned ensigns. But the likelihood of that happening seems very slim to them right at the moment.

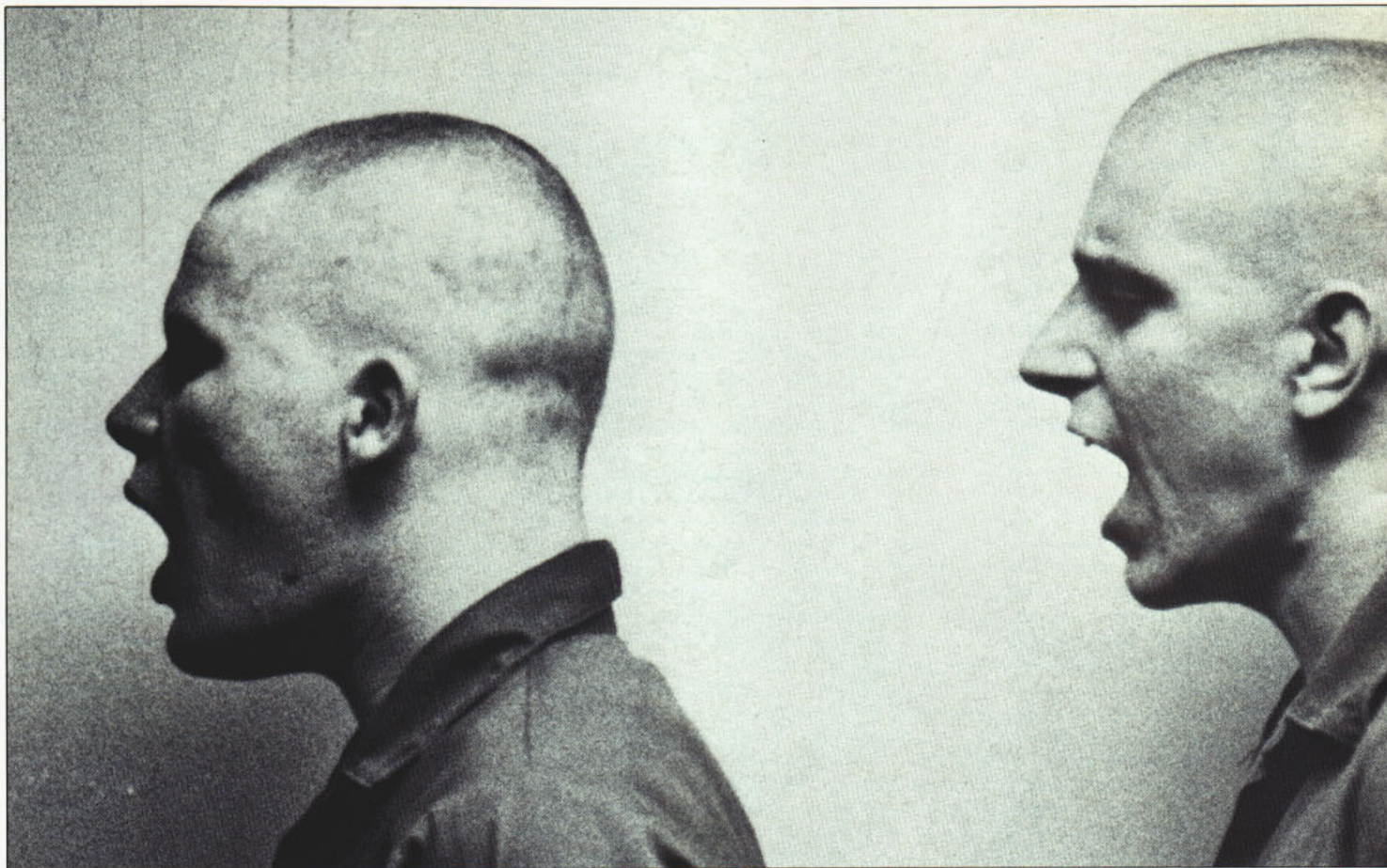
The aviation officer candidates are roused out of bed and herded into the corridor. Since they have never met their new drill instructor, Calamari introduces himself.

"On your face, freaks."

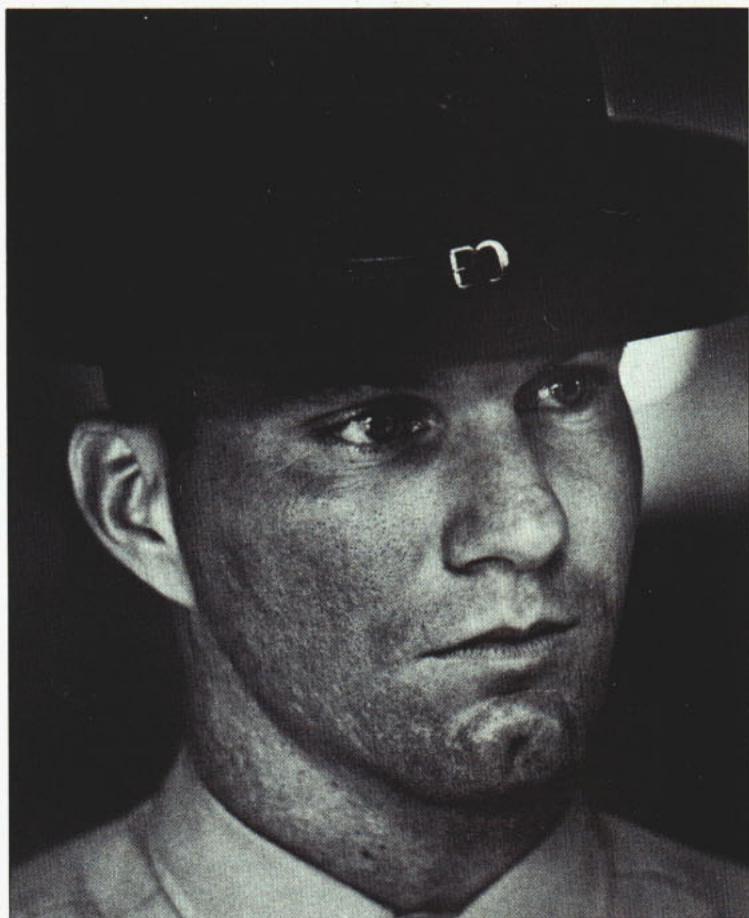
Aviation officer candidates await their initial swim test on the first day of training.







Candidates reply with enthusiasm to their drill instructor's command.





YES SIR!" they bellow in reply.

Introductions completed, they now move on to bigger and better things. Things like push-ups, side-straddle hops, leg-lifts. The kinds of things everybody wants to do at five in the morning. And while most of these terrified young candidates, or "poopies," as they are called their first week here, are giving it their all, a few aren't. And since Calamari, non-commissioned officer-in-charge, is such an understanding man, he counsels the latter group with carefully chosen observations: "Hey you, 'brain-dead,' I guess it took you four years of college to get this stupid." And since one of the goals of this training is to remove individuality and to replace it with teamwork, everyone receives the same rewards.

"On your face, freaks. Push-ups, side-straddle hops, leg-lifts, push-ups, side-straddle hops, leg-lifts," Calamari sings. The temperature in the corridor rises noticeably as 37 sweating bodies labor together. The grunts and groans sound like noises you would hear in a barn. Pools of sweat on the deck make you think there is a broken water pipe nearby.

And since everyone has worked up an appetite from doing calisthenics, the next logical thing to do

would be to eat breakfast.

Ah, breakfast. A most enjoyable part of life—you greet the day while feasting on an endless variety of delectable entrees. Maybe you like to read the paper or sip a cup of coffee or two. But since Calamari is the host today, breakfast is served his way; a la indigestion. No talking, no moving, no choices, no questions and certainly no seconds.

Sure, it doesn't sound like much fun, but like everything else here, you get used to it. Or you leave.

This is no game. Every little detail is important. It has to be that way. Aircraft are too expensive to be lost because a pilot didn't learn enough about details to pay close enough attention to an instrument or warning light.

Sure the training is tough, and sure the drill instructor seems like a sadistic monster. But when the training is completed, you'll think of him as your hero, a real demi-god.

Master Gunnery Sergeant D.W. Bearup, the chief drill instructor at Aviation Officer Candidate School, tells a story about a Navy commander at NAS Pensacola who was going to retire and wanted an AOCS drill instructor to attend the ceremony. He had been a prisoner of war for six and one-half years during

the Vietnam War and he told himself that whatever his captors did to him, his drill instructor at AOCS would have done it worse. That, he says, got him through. All of the drill instructors at AOCS went to his retirement ceremony.

The role of the drill instructor at AOCS is to teach military training, not how to fly airplanes. That comes later, maybe. First you have to get through 14 weeks of drill, classroom instruction, inspections, physical fitness training and more. And none of it is easy.

The first week is mostly devoted to a basic lesson in time management: you become efficient or you die. It's a sensory overload. This is when they weed out the people who don't really want to be here.

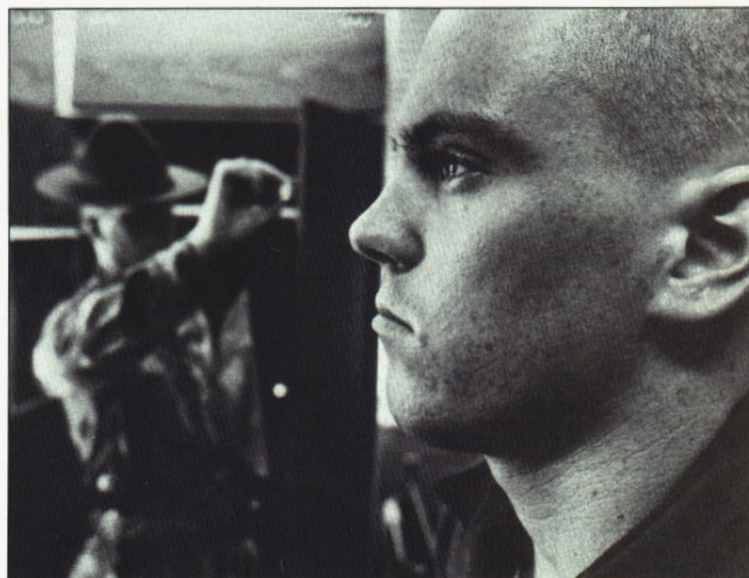
Of the 37 who started on Tuesday, three dropped out before the sun set that day. And during the next 14 weeks, many more would leave, and in most cases, it would not be their choice. Of the 2,061 candidates who reported to AOCS in fiscal year 1985, 690 were "attrited," or kicked out.

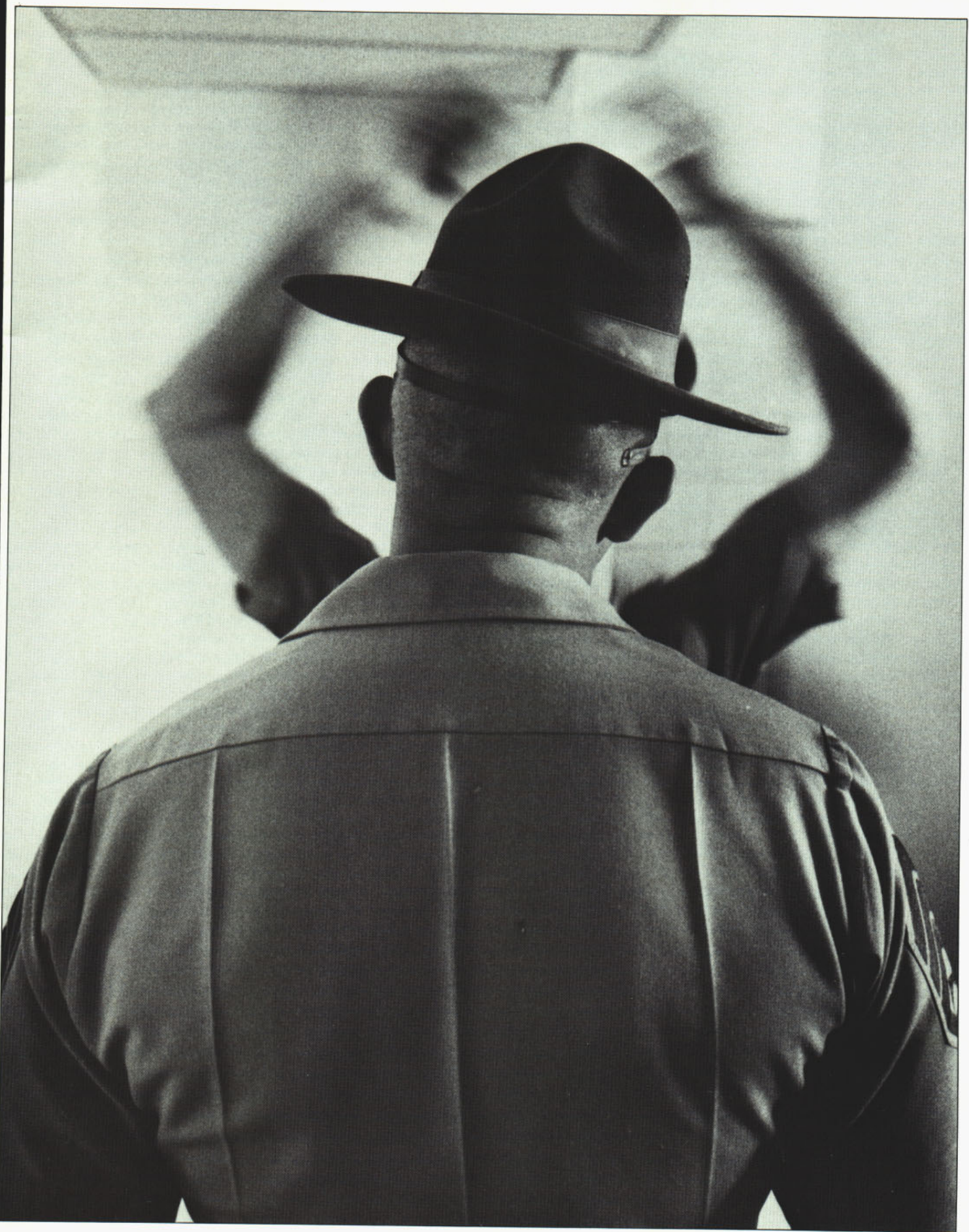
After breakfast, Calamari takes the poopies to get their first haircuts. This is the first real step taken to remove the candidate's individuality. From there, it's Poopie Christmas, where new uniforms are issued. Since time is at a premium, Calamari teaches the class the finer points of drill while they march from one place to another. Even the simple things like standing at attention require maximum effort, in the beginning.

"Heels together, toes 45 degrees apart, eyes forward, thumbs against the seams of your trousers and if you have a chest, stick it out," Calamari screams. As the weeks wear on, these things become second nature. On the first day, however, it's a nightmare.

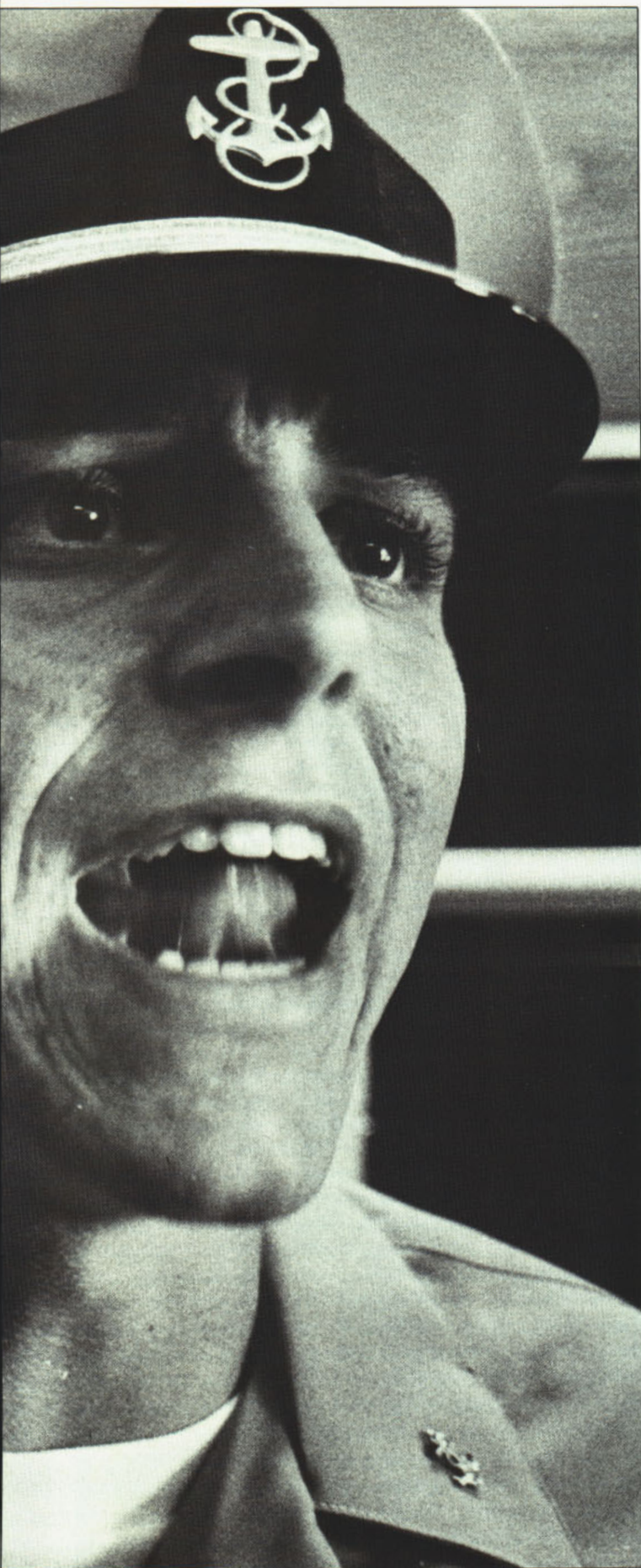
As the first week draws to a close, the poopies prepare for their first RLP (room, locker and personnel) inspection. This is considered a freebie, in that it is only to give the candidates a taste of what they will face during later inspections. The results of this inspection will not be used against them. And that's lucky for them.

Motivation is the key to success at AOCS, and the drill instructors are there to motivate the officer candidates.









It's Friday already, and the poopies are rushing to make sure that their buttons are buttoned, brass polished, beds made, and the list goes on. What happens next is best described as pure mayhem.

Drill instructors from the whole battalion join Calamari in initiating the poopies in RLP inspections. They all pour into the four-man room.

Judgment is passed on the inspection in language not fit for a family magazine; the punishment is inevitable: "On your face for push-ups!"

"Yes sir!"

And it doesn't get any prettier. Even if a candidate did something right, which is highly unlikely, he would be the last one to know.

After the inspection, they are ordered to put all their belongings into a seabag, because they are moving to another building, where they will live for the remaining 13 weeks. The idea of moving sounds like a great idea to the poopies, but little do they know that it involves a few more sessions of fun in the Florida sun. Push-ups, side-straddle hops, leg-lifts, and a few laps around the sidewalk carrying their seabags are ordered. Traffic stops to watch the show. Most of the spectators have gone through this themselves at one point in their lives. But the poopies don't mind, because after this, things can only get easier, right?

But not everything gets easier. When it comes to academics, "The Big Three" (navigation, jet engines and aerodynamics) strike fear into the hearts of all but the insane. And though The Big Three are all hard, aerodynamics is the hardest.

"It wouldn't be that hard if we had the time to study," a candidate says. "That's the big problem."

In class, students are shown slides of complex aerodynamic formulas. Interspersed with these slides, the image of a Russian Bomber is flashed on the screen. "What is this?" the instructor asks. "A target," the class replies in unison. There is no mistaking that these people are motivated, and being motivated is what this place is all about.

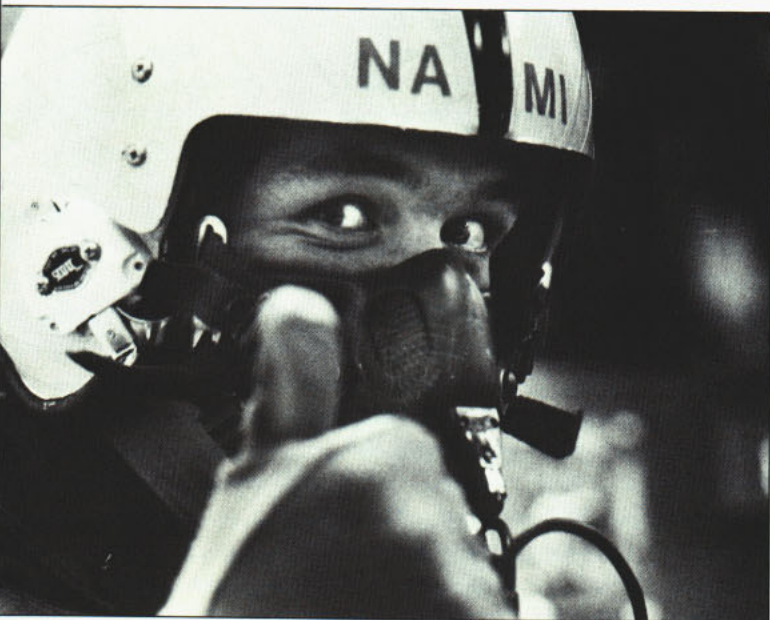
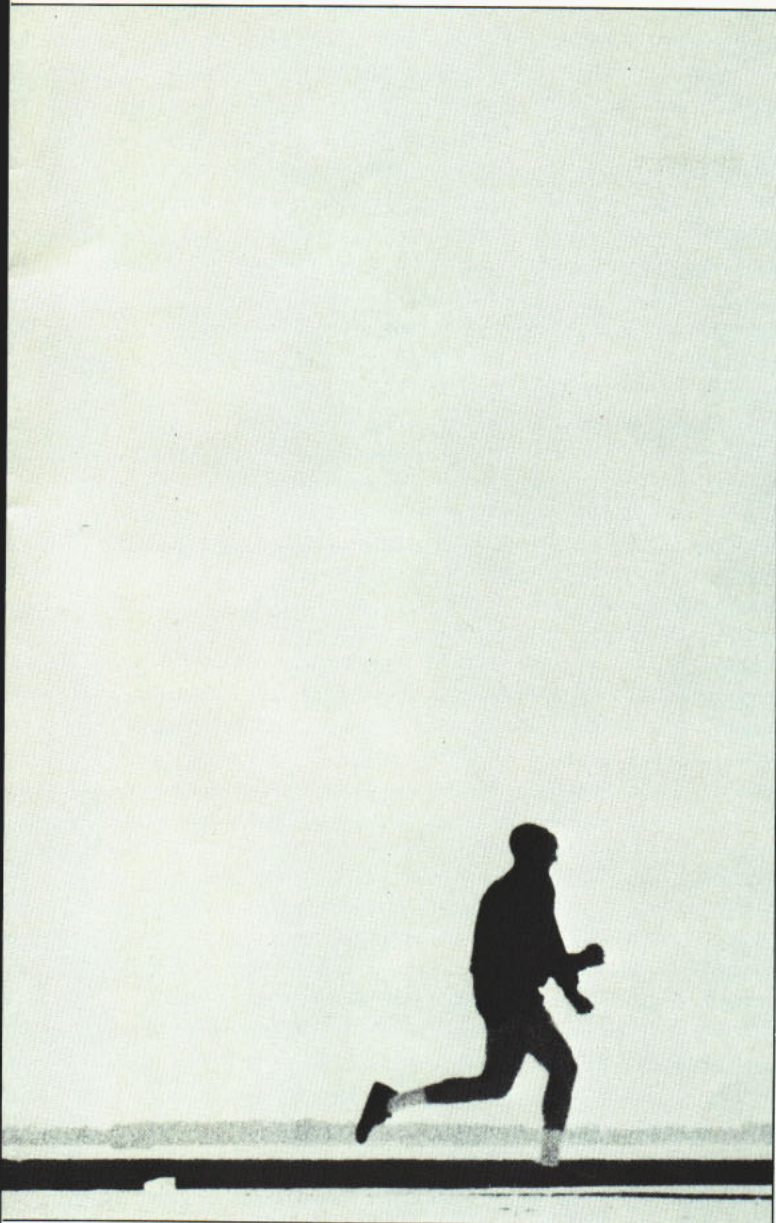
According to Marine Capt. John Kolp, a company officer at AOCS, there are three stages trainees go through to become candidates at AOCS.

Motivation is the key to success at AOCS, and the drill instructors are there to motivate the officer candidates.



Above: Candidates stretch their legs before running the obstacle course. Right: Marching with rifles begins in the second week. Far right: An AOCS candidate gives the thumbs up during a pressure chamber test.





"During the first stage, they do things out of fear. At the second stage, they do it for the drill instructor. And in the third stage, they do it for themselves," Kolp says.

Calamari believes in making candidates make decisions for themselves. "Think like ensigns, because that's what you're going to be in a few weeks," he tells them. "What good is it going to do you if I lead you around like sheep for 14 weeks," he asks?

And if being an officer candidate is hard, just think what it is like being a drill instructor for a class that's just starting training, one that is halfway through training and one that is graduating, all at the same time.

"It gets a little confusing at times," Calamari says. How do you change roles when dealing with poopies one minute and 14th week candidates the next? "You don't really change at all," Calamari says. "It's the candidates who are changing. The poopies get yelled at because they don't know what they are doing. As the weeks go by, they know more, so they are making fewer mistakes." Calamari isn't someone who screams just because he likes the sound of his own voice. "When I raise my voice, they know I'm mad," he says. "I treat them like I would want to be treated."

"Calamari doesn't have to make you respect him," a 7th week candidate says. "You want to respect him—he's very fair." This is from a candidate who was afraid to look at Calamari's face for the first five days of training.

On Friday mornings at 0500, the graduating class goes on a final run with the drill instructor. They run through the streets in formation. The only sound heard is the class singing, "I want to be an aviator."

After the run, Calamari joins the class for their last breakfast at AOCS.

"In a few hours, you're going to be ensigns," Calamari says. "When we leave here, I want you to do it just like the poopies have to. You are the leaders now. Set an example for these other candidates. Are there any questions?"

"No sir!" □

—Story and photos by PH1 Perry E. Thorsvik

TOP GUN

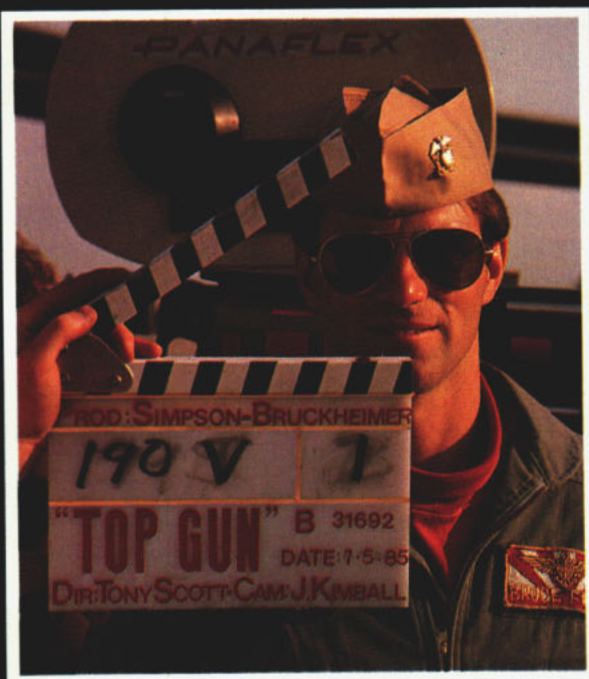
'It's not just a job...' it's a movie!

Story and photos by PH2 Michael D.P. Flynn

Hollywood enlisted into the Navy last summer when Paramount Pictures began production of its \$13.5 million action-based film, "Top Gun."

The film stars Tom Cruise of "Risky Business" and highlights the training that his character, Pete "Maverick" Mitchell, receives at the Naval Fighter Weapons School at NAS Miramar, San Diego. The

Several "real life" Navy people got to appear in "Top Gun," but the true star of the show was the F-14 Tomcat.





Top Gun

movie's title comes from the nickname given graduates of the five-week program who go on to become the Navy's "top guns."

Filming for "Top Gun" took place aboard the aircraft carriers USS *Ranger* (CV 61) and USS *Enterprise* (CVN 65). Portions of the film also were shot at: NAS North Island's Officers' Club; NAS Miramar; Naval Weapons Center, China Lake; and the Pacific Missile Test Center, Pt. Mugu.

Released earlier this summer, with the premier to coincide with celebrations of the 75th Anniversary of naval aviation, "Top Gun" is directed by Tony Scott, who also directed "The Hunter," and co-stars Kelly McGillis of "Witness," Anthony Edwards of "Revenge of the Nerds," Michael Ironside of NBC's "V," Val Kilmer of "Top Secret" and Tom Skerritt of "Alien."

Navy ships and bases in California served as backdrops for many of the movie's scenes, and several squadrons and individuals also were involved in the actual filming.

Helicopter Combat Support Squadron 1's Search and Rescue (SAR) Swim School at NAS North Island gave assistance to the shooting crew when the movie's script called for parachute jumping and water rescue scenes. Senior Chief Parachute Rigger James L. Kauber met with director Scott and discussed what support the school might provide.

"I asked them to tell me what they needed," Kauber said. "It was perfect. Their shooting script fell right in line with what we teach here at the school."

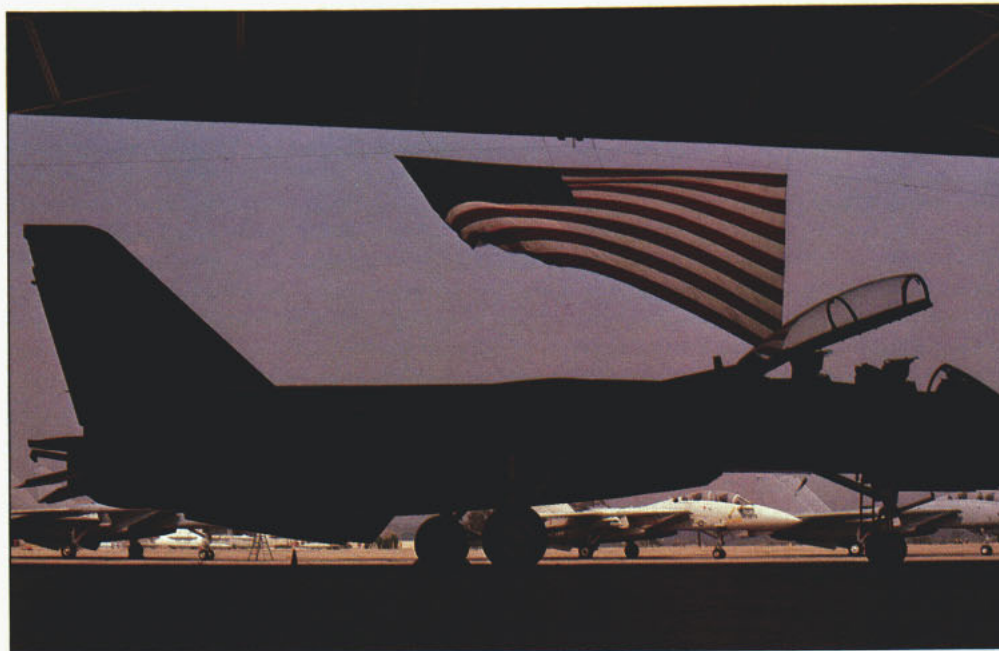
In addition to training Cruise and co-star Edwards in water survival, Kauber's crew provided technical assistance to Scott during the filming of open ocean rescue scenes.

"As it turned out, it was a good thing we were on the scene," Kauber said. Scott had selected the Coast Guard to do the helicopter rescue scenes. But, as Kauber pointed out, "He hadn't taken into account some of the differences between the Navy's SAR training and the Coast Guard's training.

The scene called for the pilot and the co-pilot to be hoisted, together, into the helo. The Coast Guard doesn't train for that sort of operation. "As the scene was shot and reshot, it became obvious that the Coast Guard swimmer was getting tired," Kauber said. "The swimmer finally told the director, 'I can't do it anymore. I gotta rest.'"

In the movies—more so than just about anywhere else—time is money. When Kauber told Scott that two-man hoists were a routine part of the Navy's SAR training, Scott put Kauber into the Coast Guard suit and finished shooting the scene.

If none of his scenes get cut, Kauber will appear three times in the film; once



as a Coast Guard swimmer, and again as a substitute for Cruise in a life raft. But the third and best moment in his film work came when Kauber and his brother, Mark, an aviation ordnanceman 1st class and instructor at the Basic Underwater Demolition School for Seals (BUDS/SEALS), got to strut their stuff high above San Diego's skyline. Mark was

outfitted in a Soviet pilot's uniform. The brothers did a free fall together during a parachute drop.

"It was all our scene, Kauber said as he recalled the thrill. "We set it up, then jumped together when we were signaled."

Lt.Cmdr. Richard J. "Warlock" Bradley, executive officer of Fighter Squadron 213, enjoyed a temporary pro-

motion when he played the role of an admiral aboard *Enterprise*. According to

Navy experience, manpower and logistical support enabled the Hollywood people to concentrate on the business end of the camera.

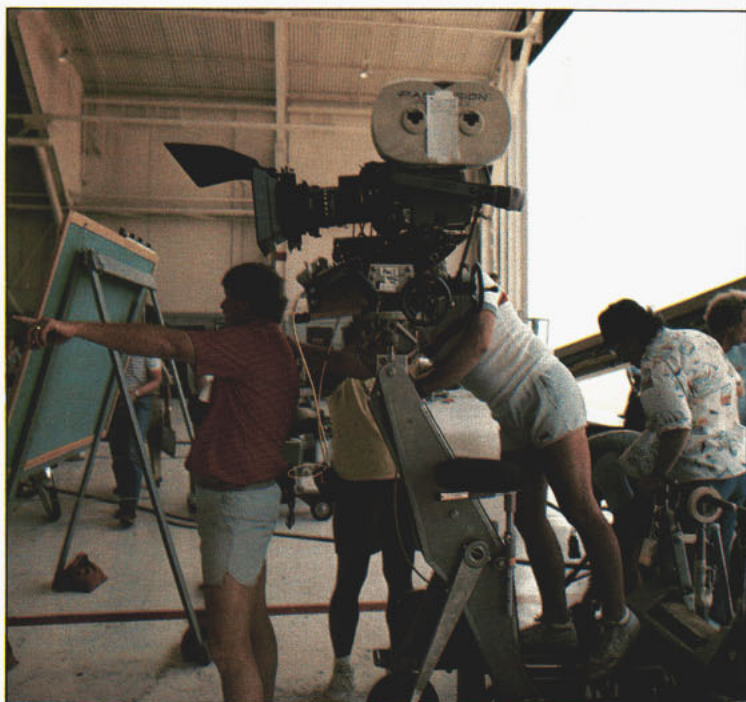
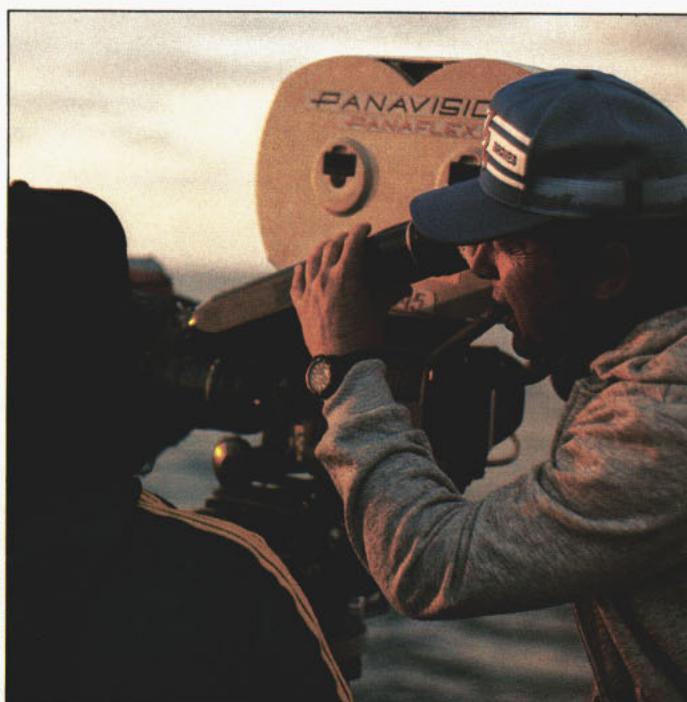


Photo by PH1 Harold J. Gerwin



Bradley, in his scene he congratulates Cruise for downing two Soviet MiGs. Bradley joked that the MiGs might not be the only thing that gets shot down. "I could end up on the cutting room floor."

Pilots from Fighter Squadrons 11, 124 and 211 will appear in the backgrounds of certain scenes in the film. They said they had to audition for the parts. "We

volunteered to be in the film, but it was the people from Paramount who made the final selection," said Lt.j.g. Bruce Fecht. "I guess they wanted to look us over first."

Hollywood has spotlighted the Navy in several recent films. "Winds of War," a TV mini-series, and "Final Countdown," a major theatrical release, were

both based on naval themes. Then there was the film, "Taps," in which Tom Cruise appeared as a military cadet. Now, with the Navy added to Cruise's repertoire of cinematic masterpieces, and considering the excitement involved in filming "Top Gun," it can be said that Tom Cruise's film career is "Not just a job... It's an adventure." □

Navy saves sinking star

Navy search and rescue instructors saved the life of movie actor Tom Cruise during the filming of "Top Gun."

Ironically, the rescue came during the shooting of a sequence that depicts Cruise as a Navy F-14 fighter pilot rescuing his radar intercept officer after their plane has crashed into the ocean.

In the scene, an articulated dummy (a mannequin built to accurately represent a human form) was put in place of co-star Anthony Edwards. Outfitted in flight gear and a parachute, the dummy was deliberately sunk below Cruise's life raft.

A major problem faced by all downed pilots is a possibility that their parachutes might fill with water and pull them under the ocean's surface. That is precisely what happened to the dummy in the rescue scene. Cruise, when he tried to pull up the dummy, became entangled in the parachute's lines.

While underwater photographers filmed the action from below, the movie company's safety divers recognized the danger Cruise was in. They immediately surfaced and yelled for help. The Navy came to the rescue, with Aviation Electronics Technician 1st Class John Buttler and Aviation Ordnanceman 2nd Class Daryl Silva responding to the call.

Buttler piloted their motorized raft to the scene, and Silva grabbed Cruise, who was being pulled farther under water by the chute. After shutting off their raft's motor, Buttler helped Silva pull Cruise to the surface.

"John and I were partially submerged, holding onto Cruise," Silva said. "Somehow—we managed to pull him up a little farther."

When Cruise's head broke the surface, Silva dove under to disentangle the parachute lines. "I dug my knees in just under the raft's tube, holding Cruise with all the strength in my arms," Buttler said.

"At this point, Cruise was unconscious, his body was limp," Silva recalled. "The parachute lines had been wrapped around his wrist and the big aviator's watch he had on."

After Cruise was freed, the dummy and its flight gear quickly sank right to the bottom.

Cruise recovered in the life raft and

continued filming as SAR swimmers stayed nearby.

Silva is a SAR instructor from the HC-1 Search and Rescue Swim School at NAS North Island. Buttler has since transferred from HC-1 to HSL-31. Several SAR instructors worked as advisors to "Top Gun's" director Tony Scott and provided technical assistance during the shooting of the open ocean sequences. □

Flynn is assigned to FltAVComPac, San Diego.

Navy safety divers work to position a parachute during filming of a rescue scene, a scene that eventually required a real rescue.



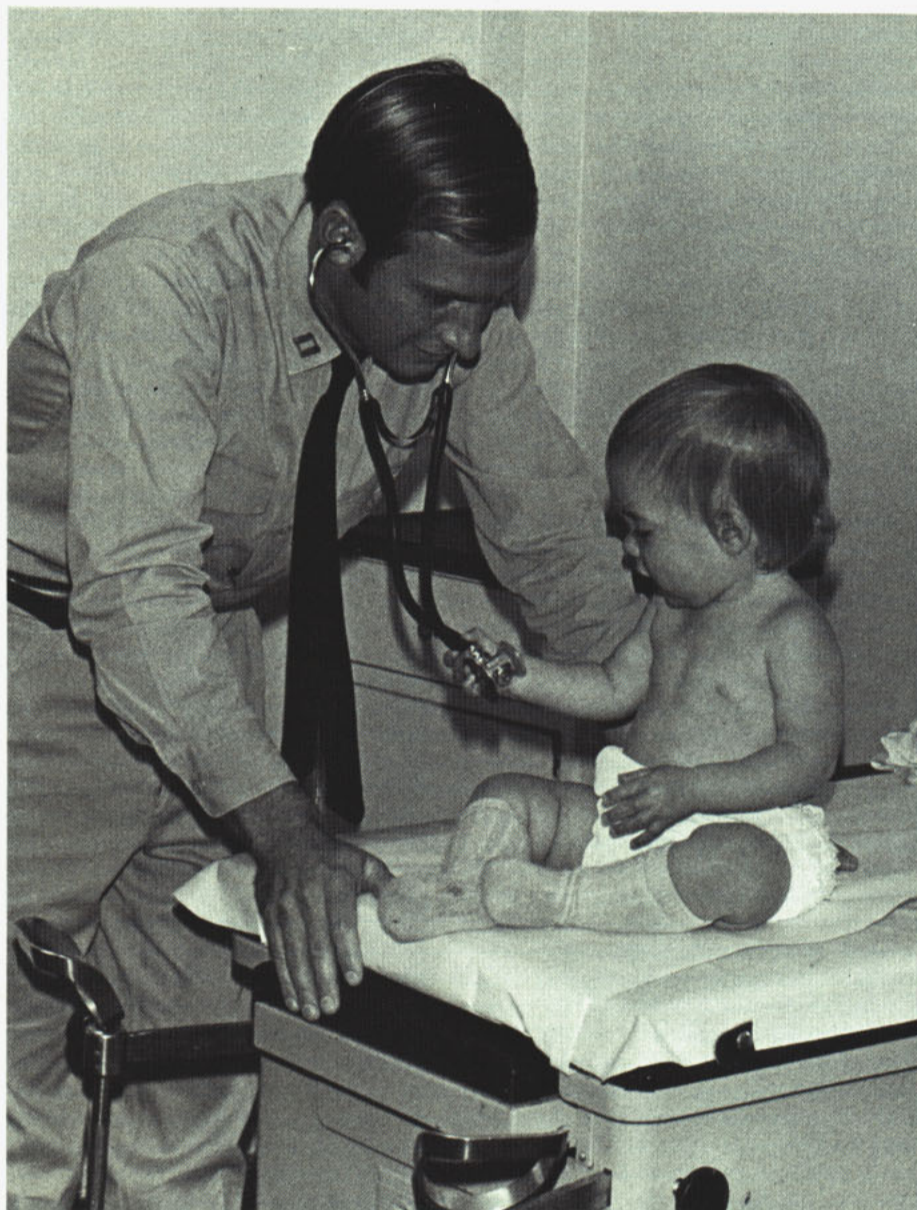
The Log Book

Here are some more excerpts from *All Hands* articles of days gone by.

10 Years Ago— May 1976

- Navy corpsmen and physicians are using satellites and high frequency radio

waves to treat patients. The Remote Diagnosis System (RMDS) enables corpsmen aboard ships to communicate directly with doctors ashore or in other ships by television pictures and accompanying voice transmissions sent via satellite. The system can also use telephone lines and line-of-sight microwaves to send and receive images.



20 Years Ago— May 1966

- The Navy Hospital in Saigon is the most modern and well-equipped hospital in the Republic of Vietnam. Last year alone more than 2,000 patients were treated in the hospital as well as 73,000 outpatients. Staffed by nine doctors, seven nurses, two medical administrators and 84 enlisted corpsmen, the hospital has met challenge after challenge brought on by the escalating Vietnam conflict. It opened for business in 1963.

40 Years Ago— May 1946

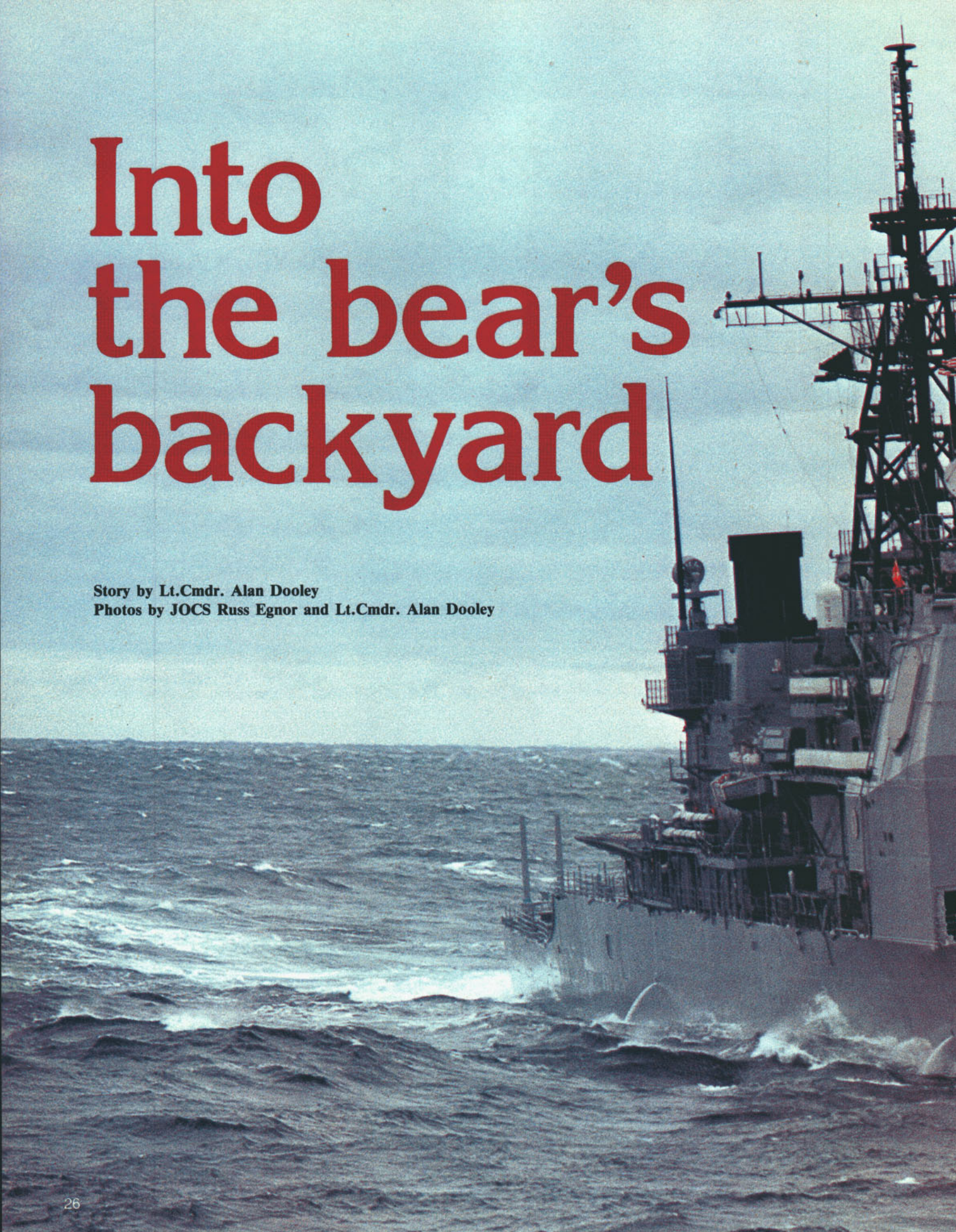
- Currently probing the fantastic push-button world of power and energy which emerged from World War II, the Navy has entered upon the most extensive scientific research program in its history. Lining up the nation's top-notch scientists, the Navy is delving into the realms of atomic energy, jet propulsion, gas turbines, pilotless aircraft and airborne television.

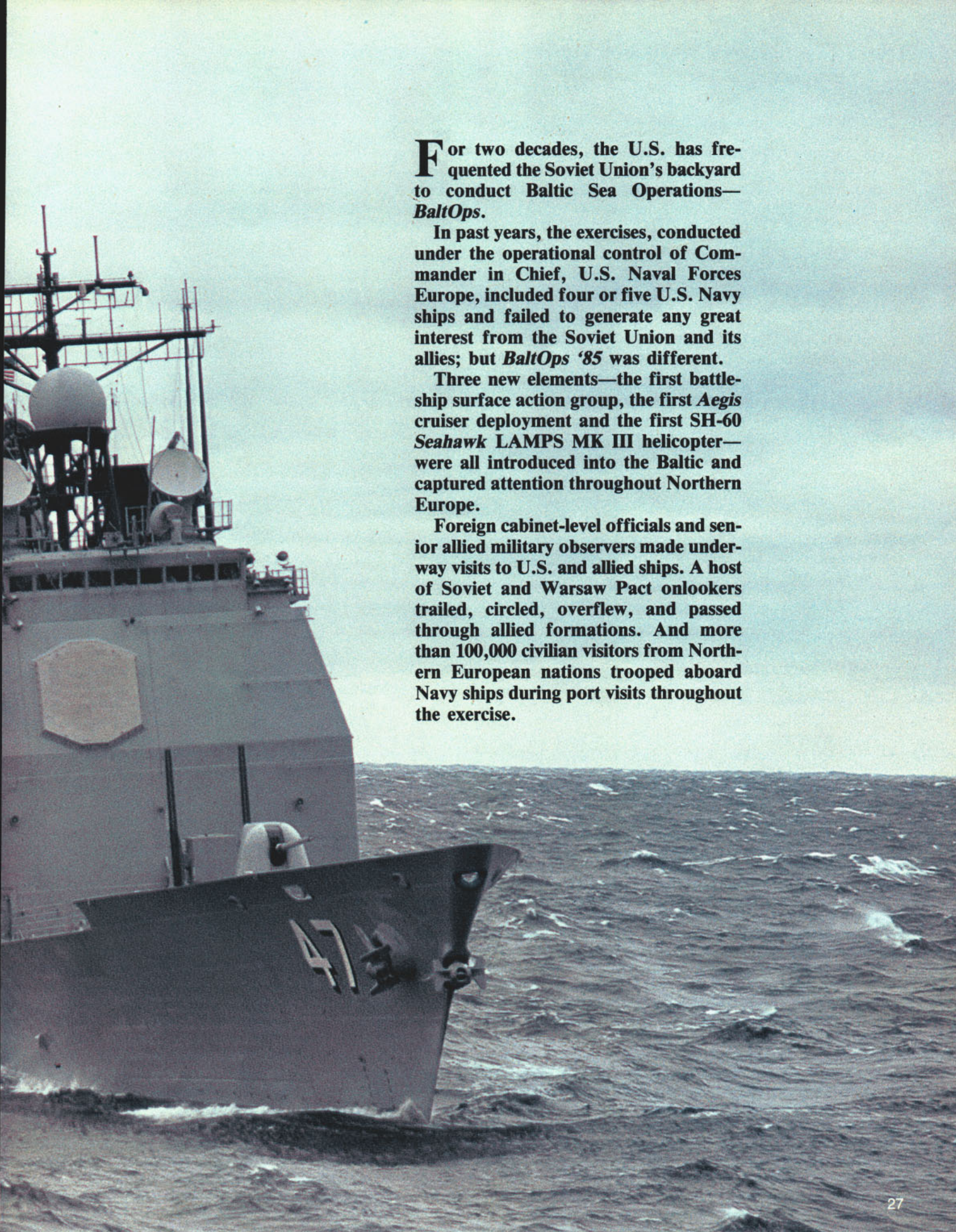
- "To date no further information has been received . . . and . . . in view of the length of time that has elapsed, I am reluctantly forced to the conclusion that all hands are deceased." Thus the Secretary of the Navy recently closed the books on three warships which disappeared without trace in the terrible aftermath of the Battle of the Java Sea early in World War II. And thus the names of the destroyers *Edsall* and *Pillsbury* and the gunboat *Asheville* were added to the list of "mysteriously missing" ships of World War II, bringing to five the number of U.S. surface vessels classified as presumed lost. The missing surface ships are the destroyer *Jarvis* and the Q ship *Atik*. All disappeared in 1942 without a trace. □

Into the bear's backyard

Story by Lt.Cmdr. Alan Dooley

Photos by JOCS Russ Egnor and Lt.Cmdr. Alan Dooley





For two decades, the U.S. has frequented the Soviet Union's backyard to conduct Baltic Sea Operations—*BaltOps*.

In past years, the exercises, conducted under the operational control of Commander in Chief, U.S. Naval Forces Europe, included four or five U.S. Navy ships and failed to generate any great interest from the Soviet Union and its allies; but *BaltOps '85* was different.

Three new elements—the first battle-ship surface action group, the first *Aegis* cruiser deployment and the first SH-60 *Seahawk* LAMPS MK III helicopter—were all introduced into the Baltic and captured attention throughout Northern Europe.

Foreign cabinet-level officials and senior allied military observers made underway visits to U.S. and allied ships. A host of Soviet and Warsaw Pact onlookers trailed, circled, overflowed, and passed through allied formations. And more than 100,000 civilian visitors from Northern European nations trooped aboard Navy ships during port visits throughout the exercise.

Into the bear's backyard

The biggest attention getter was the 58,000-ton battleship USS *Iowa* (BB 61), modernized and recalled to active service in 1984 to head up a surface action group. This was the first visit of a modern U.S. Navy battleship and the *Aegis* guided missile cruiser USS *Ticonderoga* (CG 47) to the Baltic.

Other U.S. Navy ships that took part in *BaltOps* '85 were the frigates USS *Pharris* (FF 1094) and USS *Aylwin* (FF 1081), the guided missile frigate USS *Halyburton* (FFG 40) and the oiler USS *Merrimack* (AO 179). P-3C *Orion* patrol aircraft of Patrol Squadron 10, temporarily reassigned from deployment in Iceland, also participated in the exercise.

For the U.S. ships' crews, *BaltOps* came on the heels of another exercise—*Ocean Safari*, where several aircraft carriers and dozens of ships stretched across the Atlantic to practice tactics used to control vital Atlantic supply routes. At the end of *Ocean Safari*, most of the ships returned to U.S. homeports, but the ones detailed to *BaltOps* made visits to ports most Western Pacific and Mediterranean sailors never see—Aarhus, Aslborg and Copenhagen, Denmark; Dublin, Ireland; Oslo, Norway; Goteberg, Sweden and Portsmouth, England.

Early in October, the *BaltOps* ships assembled in the Baltic under the on-scene command of Commander, Destroyer Squadron 14, Capt. Michael E. Fitzgerald. There the U.S. Navy ships were joined by their allied counterparts from the United Kingdom, Denmark and West Germany, as well as aircraft from the Royal Netherlands navy and the NATO Airborne Early Warning Force.

The Baltic, important as a commerce route and as the home of one of the four main Soviet Fleets, has strategic significance as the northern flank of the "peninsula" of Europe. It stretches north and east into the heart of Europe for 1,000 miles. Almost entirely landlocked, and about the size of California, it is surrounded by Sweden and Finland on the north, Denmark, East and West Germany and Poland on the south, and the Soviet Union on the east.

Looking more closely at a map of the eastern shore, one notes the ancient Russian city known today as Leningrad and the nearby Soviet Baltic Fleet base at Kronstadt. And there are the dotted lines delineating the former independent Baltic

states of Latvia, Lithuania and Estonia, now swallowed up by the Soviet Union.

Standing a lookout watch in the Baltic can be a bone-chilling experience for any sailor. Even early in the fall, the sea whips into steel gray and off-white to



merge with a gray sky to form a foggy, invisible horizon. Temperatures reach freezing, before the wind chill factor is taken into account, and stand as a reminder that the bulk of the Baltic is usually covered by thick ice during the winter.

On the bridge, officers of the deck and their watch sections must keep track of a rapidly changing surface plot situation. The Baltic is a busy avenue of commerce and a heavily fished body of water with many small islands, rock outcrops and

shoals, especially in its shallow southern part—so there is plenty to watch for.

Below decks, in command and control spaces, the surface picture is integrated with an air picture that is thickly laced with commercial air routes—Helsinki to Hamburg; Copenhagen to Stockholm; Oslo to Berlin.

These navigation burdens were eased by the inclusion of the *Aegis* guided missile cruiser *Ticonderoga* in the exercise. According to “Tico” Operations Officer Lt.Cmdr. Tom Bush, “This is the first time in a *BaltOps* exercise that participants have had available to them a complete picture of the air activity. We are showing everyone a 21st Century anti-air warfare picture,” he said, adding that the same information was useful in ensuring the safety of all exercise aircraft and civilian planes in the region.

In another dimension, a complete sub-surface plot must also be maintained. Heavy, noisy surface traffic, and different water temperatures and salinities conspire with the hard, rough bottom of this shallow sea to make submarines especially hard to locate. And if that’s not enough, much of the Baltic’s ocean floor is iron ore, which can obscure a submarine’s magnetic signature.

In this complex environment, thousands of allied sailors acted out two basic scenarios: one time playing the aggressor role, then later switching to the defense.

It is assumed that in any general war in Europe, Warsaw Pact powers would attempt to seize the islands in the straits leading into the Baltic. They would do so to secure interior lines of communication and to ensure their ships could break out into the Atlantic.

Working on this assumption, one *BaltOps* scenario pitted the aggressors and defenders against each other with sup-



Previous page: *Aegis* navigation capability made *Ticonderoga* a key *BaltOps* player. Pages 28 and 29 Iowa's sun-bathed entrance into Kiel harbor contrasted with its night gunnery ops. During port calls in Kiel and Goteberg, visitors strolled decks that had been the scene of LAMPS Seahawks activity.

Into the bear's backyard

porting aircraft to defend the choke points at the mouth of the Baltic. In the course of the simulated amphibious thrust, attacking aircraft, fast patrol boats with over-the-horizon missile capability, simulated mines and submarines were encountered and defended against.

Later in the exercise, a Baltic breakout scenario called for one group of ships to play the role of Warsaw Pact units seeking to break through the bottleneck of the Baltic approaches to engage in an Atlantic offensive. Again, simulated mines, missile patrol boats, submarines and aircraft successfully countered the attempt.

One of the most valuable aspects of *BaltOps '85* was the exchange of personnel from the participating nations. Most of the ships took part in a personnel exchange program in which West German, U.S., British, Danish and Dutch sailors, plus a Canadian Forces officer from the NATO AWACS Force, served in various ships of the other participating nations.

These exchanges offered insights into participating allied navies' professionalism.

Canadian Forces Capt. Rob Brown, going to sea in the *Ticonderoga*, 35,000 feet below his squadron mate flying in NATO Airborne Early Warning Forces E-3A AWACS aircraft, said, "It's really great to work with a ship capable of making use of the vast volume of data available from AWACS."

Perhaps of greater importance, a West German sailor became, "my friend Jurgen." His Danish counterpart became "Neils, the fellow I'm going to Copenhagen with when this exercise ends," and so on. A respect that grows from serving together flourished, and with it, trust.

Another valuable aspect of *BaltOps* was the opportunity to exercise new U.S. equipment in the demanding Baltic Sea environment. Lt. Cmdr. Ronald Nasman, operations officer for the two-helo HSL

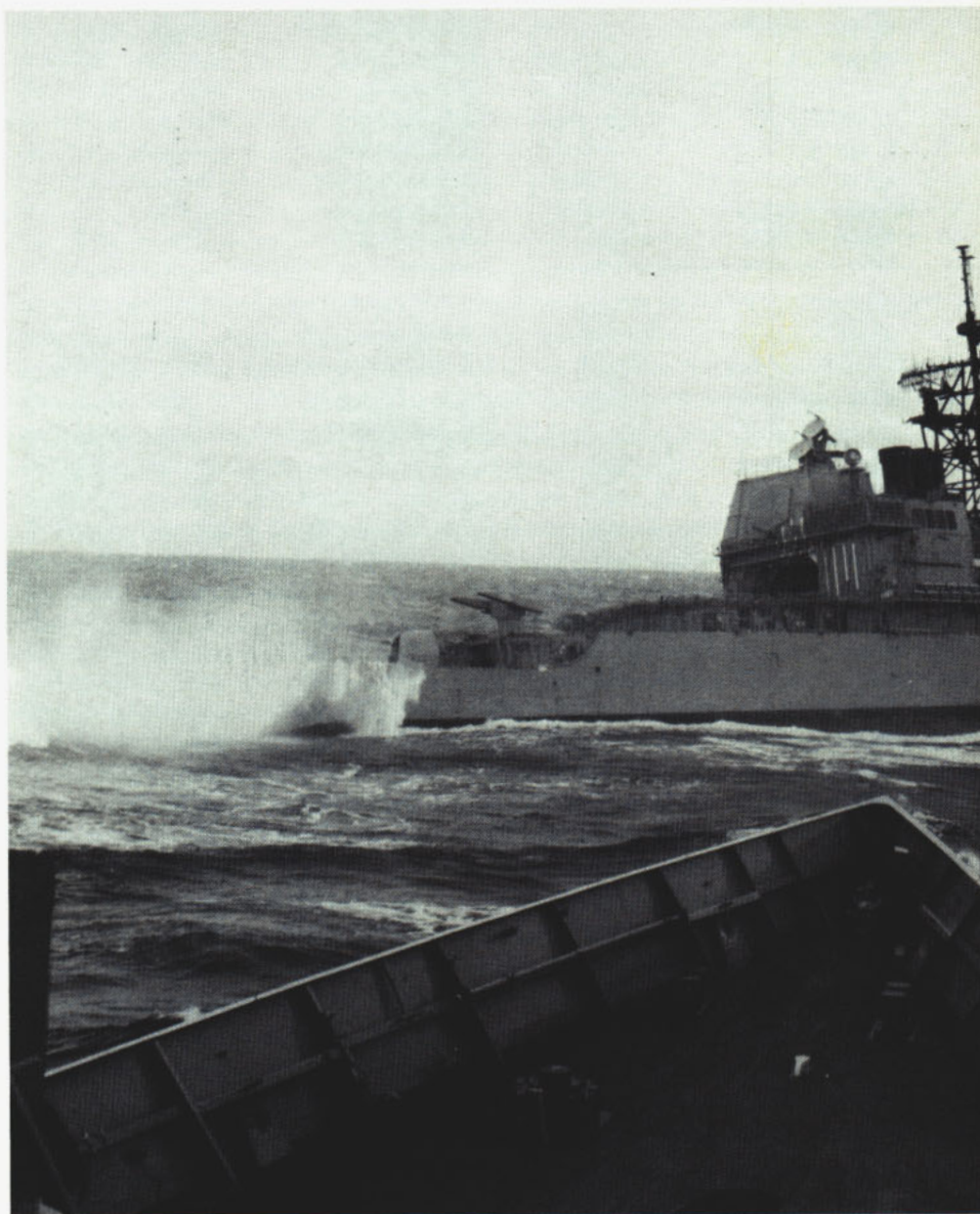
42 *Seahawk* detachment assigned to *Halyburton*, said, "Lessons we've learned on this deployment under these conditions will be put to good use in determining future changes in the ways we use these helicopters."

For many, the high point of the exercise came on the morning of Oct. 17. As the chilled darkness gave way to a feeble gray daylight, ships of the force maneuvered quietly to take stations on the starboard flank of *Iowa*. Half of the ships fanned out ahead of the battleship, with

the rest arraying themselves astern. An East German intelligence-gathering ship steamed through the group, seeking a safe vantage point. A Soviet *Kashin* lurked not much further away.

Overhead, a Swedish Saab *Viggen* fighter put on a low-level demonstration, wave-hopping through the formation, leaping over ships, then flashing on its afterburner as it disappeared.

With all the players in positions, silence settled over the exercise area. *Iowa's* announcement system could be heard across



Heavy seas and close maneuvering were common during *BaltOps*. Here *Ticonderoga* crosses ahead of *Halyburton*.

the water; a forthcoming gunnery exercise was described for embarked dignitaries.

First a *Phalanx* CIWS—close in weapons system—gun was fired. The gun, designed as a last-ditch defense against low-flying aircraft and missiles, made sounds like a chain saw trying to cut through a steel pipe, and a thousand yards away, the sea was churned by 50 20-millimeter cannon shells striking in a single second.

Then a 5-inch, 38-caliber gun mount

fired several times. The sharp bark of the guns was even louder than the *Phalanx*, and the flash and smoke was more impressive.

Finally a forward 16-inch turret was swung ponderously to starboard. Certain visiting "experts" were overheard to suggest, "The 16-inch gun really isn't supposed to be that bad. I've heard it doesn't have a sharp bark like the 5-inch 38."

The first 16-inch round indicated they might just be wrong. As the single projectile exploded out of the gun—taking with it more steel than it takes to make a compact automobile—it was distinctly louder and more awesome than a 5-inch gun.

After each of three rounds, a yellow-brown cloud arose, and an audible blast of compressed air caused a white plume to spout from the barrel.

Finally all three of the massive turrets, each weighing as much as a World War II destroyer, swung to starboard.

All nine 16-inch guns and six 5-inch guns erupted simultaneously in a battleship broadside. Witnesses hundreds of yards distance experienced waves of sensation: an ear-numbing explosion, a hammering compression wave, and an intense blast of heat, much as one gets from snatching open an oven.

Although the excitement of a full battleship broadside could not be sustained throughout the exercise, the overall pace of *BaltOps* never slackened. Between major evolutions, subsets of the larger plan—or serial—were carried out. Each smaller serial presented various combinations of ships with a variety of problems. This part of the exercise gave individual ship commanding officers a chance to assume the role of tactical command of a multinational group, an important goal of interoperability training.

Wars are so often associated with adverse weather conditions and darkness that it was perhaps fitting that the sun rose in an intensely blue sky the morning the exercise ended.

Steaming into Keil, West Germany, aboard his flagship *Ticonderoga*, Destroyer Squadron 14 Commodore, Capt. Michael Fitzgerald, related his observa-

tions of *BaltOps '85*, its lessons and its successes.

"The Baltic Sea is narrow and shallow. Its waters are very confined and very different from the open seas of the Atlantic," he said.

"We saw demonstrations of, and participated in, submarine hunting tactics against very small, very quiet diesel subs in shallow water. They were not easy to find under those (environment) circumstances, even with the professional assistance of British *Lynx* and LAMPS MKI and MKIII helicopters."

Another unusual element was over-the-horizon missile attacks simulated by Danish and West German fast patrol boats. "Mixed in with fishing boats, navigation aids, and under the cover of darkness and weather, they're awfully tough to find and neutralize," Fitzgerald said.

He praised the professionalism of allied ships and men and said they reflected techniques and skills fully comparable to those of their U.S. counterparts. He was especially complimentary of the aerial gunnery demonstrated by a West German unit that scored on 15 of 16 shots at a towed aerial target sleeve.

Capt. Gerald E. Gneckow, commanding officer of *Iowa*, said of *BaltOps '85*, "Not only does the exercise demonstrate the freedom of the Baltic as an international sea, but it is a demonstration of support for U.S. allies in the area."

BaltOps '85 concluded with a final round of port visits, U.S. sailors by then feeling less as if they were visiting foreign countries and more as though they were just unwinding with new and good friends. In all the countries visited, only one problem was voiced: "It was hard keeping up with how much of their money equaled how much of ours," one petty officer said.

And to think that tourists pay thousands of dollars to experience the same "trouble." □

Dooley is assistant public affairs officer, CINUSNavEur; Egnor, a reservist, spent his two-week active duty time on the BaltOps exercise.



Keeping them

It isn't easy to awe naval aviators. Catapult them into the wild blue yonder at ungodly speeds, and they love it. Make them land on the pitching flight deck of an aircraft carrier, and they barely flinch. But send them on a tour of a Naval Air Rework Facility and watch their jaws drop.

"We started giving tours to maintenance officers, chiefs and repair crews, so they could see what was happening with their aircraft," said one NARF employee. "Pilots and squadron commanders are always surprised at how far we actually take the aircraft down. We take them all the way down to parade rest."

In an operation similar to shipyard overhauls, rework facilities take the sophisticated aircraft that aviators hold so dear to their hearts, strip them of their sexy facades and expose them for what they truly are—delicate webs of ultralight metals, miles of wire and an intricate network of complex avionics that straddles a fine line between aeronautical theory and actual flight.

"If you watch a surgeon at work, you get a whole new perspective on the human body," said Cmdr. Thomas Giardina, a pilot who is the current production officer at NARF North Island, Calif. "It's the same thing with an airplane. When you go out on the production floor and see

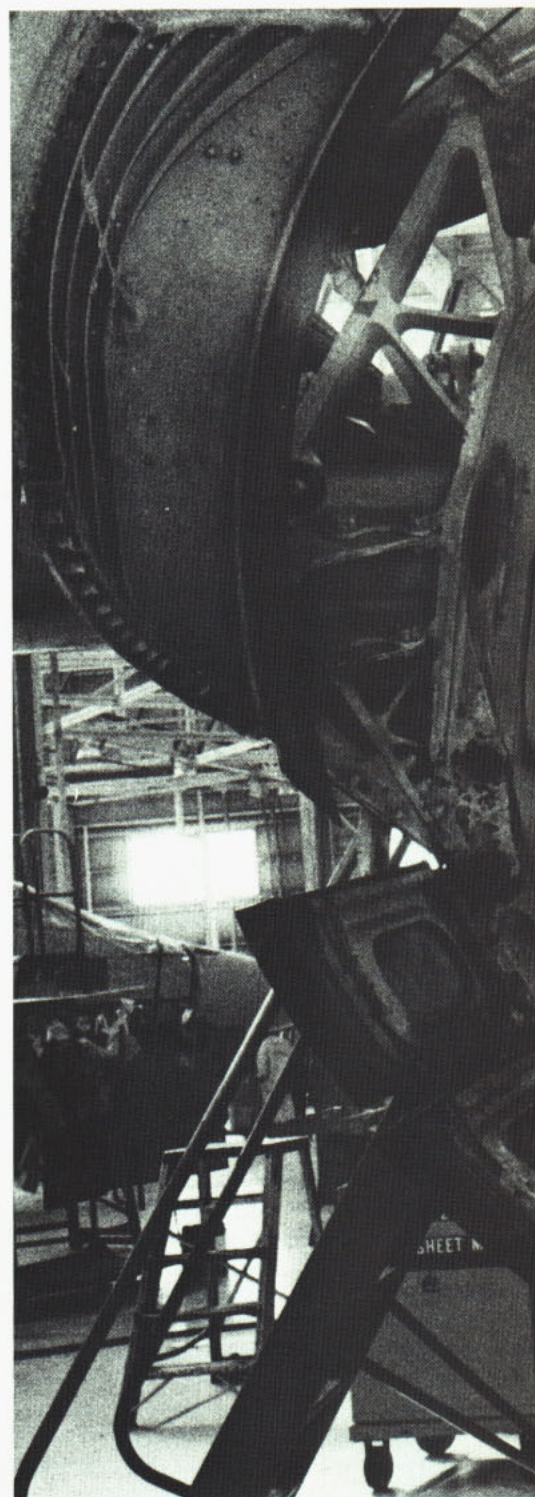
one taken down that far, you become aware of all the dedicated people and the various skills and trades that have to be coordinated to keep those airplanes flying."

A series of pit stops at rework facilities is what keeps Navy aircraft flying. In addition to major repairs, the aircraft also receive modifications that have been developed to improve performance and safety. It takes time and money, but the payoff speaks for itself.

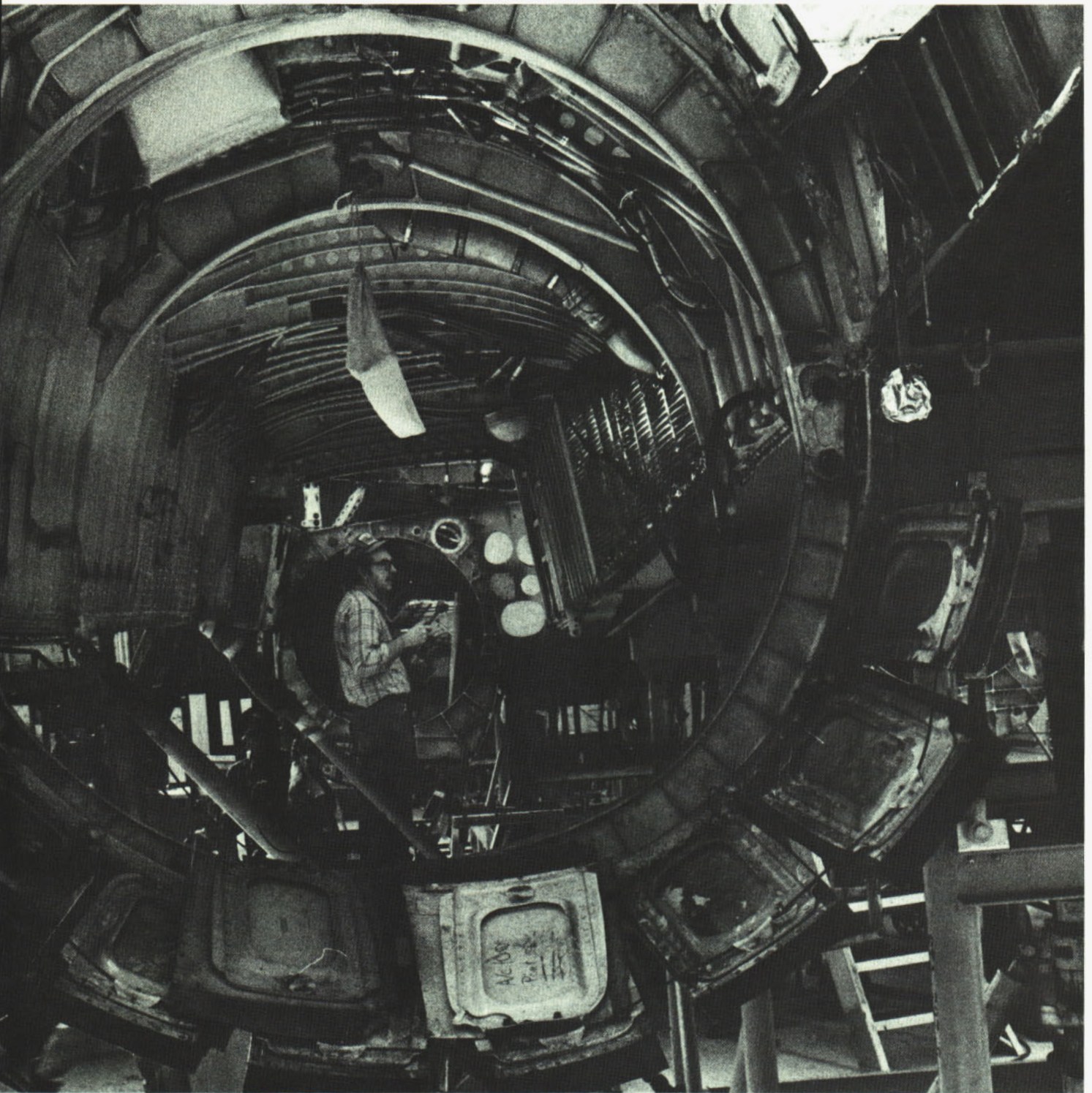
A new F-14 costs the Navy about \$38 million. The Navy spends an additional \$1.8 million to overhaul these aircraft, about every five years. By doing so, the Navy is able to keep them fully operational and mission-capable for about 6,000 flight hours, or about 20 years—sometimes longer.

NARF North Island, the Navy's largest rework facility, handles four major lines of aircraft—F-14s, E-2Cs, F/A-18s and H-46 helicopters. A sprawling 362-acre industrial complex on Coronado Island in San Diego Bay, the North Island facility operates on a \$380-million budget, including an annual payroll of \$167 million. Excluding county government, it is

Last year, NARF North Island took 134 of the most complex aircraft in the world and made them better—by turning them inside out.



IN THE AIR



Keeping them in the air

the third largest employer in the San Diego area, behind only General Dynamics and Pacific Bell Telephone Co.

The workforce of 5,200 is made up mostly of civilians, who average 12 years experience in 52 skills. These people perform a wide range of engineering, calibration, manufacturing and repair services—services that not only keep the Navy flying, but also make the best use of taxpayers' money.

When the Navy needed a special part to repair rotors on its H-53 helicopters, North Island tooled up faster than civilian industry, and was manufacturing 12 precision parts a day. In another case, a civilian manufacturer wanted \$2 million to repair the titanium structure on F-14s. The rework facility spent \$84,000 on specialized welding equipment and did the same job in-house.

NARF North Island doesn't limit its services to the aviation community. Field teams are sent throughout the United States, overseas and aboard deployed ships where their tasks range from repairing catapult and arresting gear to changing main propulsion engines in gas turbine-powered ships.

Every part of an aircraft, no matter how large or small, can be removed and reworked at NARF.

The ability of NARF employees to get the job done came as a pleasant surprise to Giardina. Before coming to the facility, he had heard horror stories about the perils of working with Navy civilians—unaffectionately called “sand crabs” in the fleet. When he arrived at North Island, he discovered that most of what he had heard was untrue. He quickly gained a sense of trust for the professionalism of the artisans and the other people at NARF North Island who prepare aircraft for flight.

“When you're in the military you tend to judge people by appearances—the guy's got to have a good haircut and look like a real clean-cut guy,” said Giardina. “Well, you oughta see some of the people down on *this* production line.

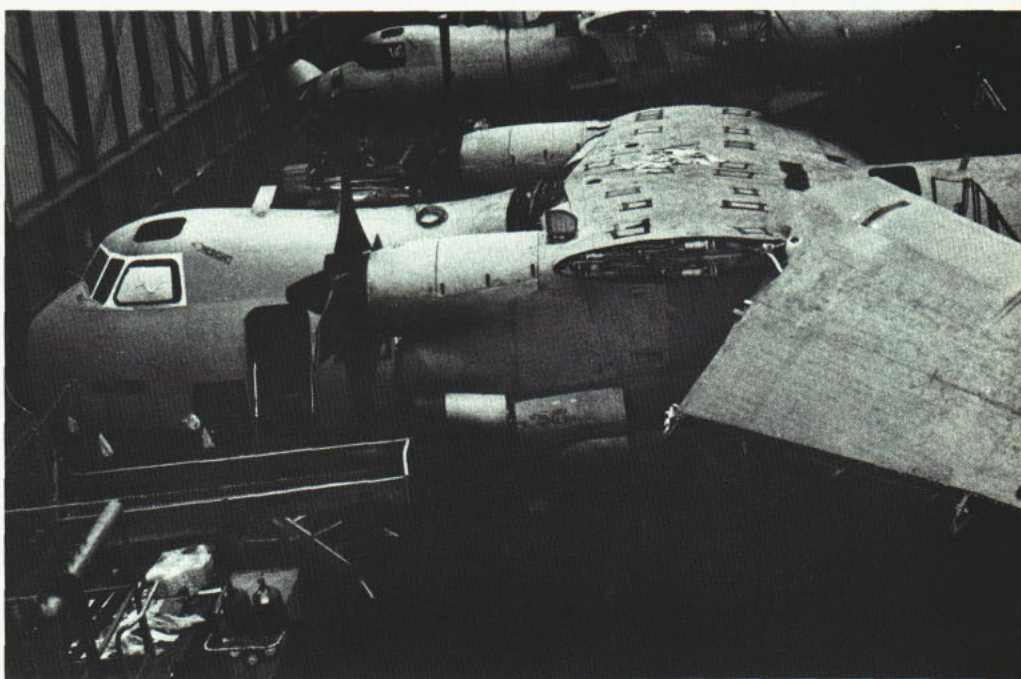
“I remember the first time I saw this one guy. He looked like a Hippy,” recalled Giardina. “But after I got to know the guy, watched him work, and flew in several of his airplanes, my respect for him got to the point where if he was the person who signed for it, I just knew everything was going to be right. He had 25 first-flight-sells (an aircraft that has “zero defects” when it is test flown for the first time following rework). I learned to trust him totally. If he said the plane was good, I believed him.”

It's hard not to believe in the people who work at North Island. Some have as many as 40 years experience working on high-performance aircraft. Still, looking at dozens of stripped fighters along the disassembly line, their vital systems spread throughout the facility's 77 buildings, it's hard to imagine—especially for an aviator—that they will ever fly again.

As Giardina explained it, once a pilot realizes the complexity of the rework process, he is apt to worry more about whether everything was put back properly.

“I couldn't believe that for three and a half years I had been flying around in an aircraft that once looked like that,” said Lt. Mark Williamson, a naval flight officer who flies backseat on F-14s. “It's a real confidence builder, seeing an aircraft all torn down and then getting out there and flying in it.”

NARF North Island goes to great lengths to ensure that the faith naval aviators have in them is well placed. Part of the quality assurance program at the facility requires that every nut, bolt and screw that comes off an aircraft must be accounted for, so they are tracked every step of the rework process. When you consider that the computerized listing of the parts removed from an F-14 during



rework is about 9 inches thick, it becomes clear how massive an undertaking the rework process is.

Aircraft rework is big business, and it is not all performed at the shop level. Navy rework facilities operate under the Navy Industrial Fund concept. They do not receive an allotted amount from Congress each year. Instead, they bid on work and charge their customers for the manpower, parts and overhead needed to get the job done. It takes a lot of savvy to make such a system work.

"We are like a business, but our goal is to break even," explained Lt. Cmdr. Mike Kalas, the facility's resources and financial officer. "We have no money to burn. We have to be efficient."

But efficiency is sometimes misunderstood. When an aircraft is sent in for rework, some members of the aviation community expect it to look like it just rolled off the showroom floor when they get it back. What they get, however, is what they paid for.

"The aircraft aren't gold-plated when they come out of here," said Kalas. "We spend the money to make them functional—we don't try to make them pretty." He went on to explain that emphasis at a NARF is on making sure the important things get done. Anything dis-

covered during the rework process that threatens the safety or performance of the aircraft is fixed without question.

Foresight, as well as efficiency, is needed to make a rework facility work in harmony with the fleet. These facilities must be able to respond to every trend and technological advance in the aviation industry. The first aircraft to roll into North Island's hangars for rework had cloth "skin." Now, only 67 years later, high-performance aircraft are made of exotic substances like titanium and graphite composites. To keep pace, rework facilities begin planning for an aircraft at the earliest stages of the acquisition process. NARF North Island operates on a 10-year developmental plan.

"When the Navy first decided to buy F/A-18s in 1975, we knew we would have to have a composite repair facility by the time the aircraft started coming in for rework," says Gene Severino, director of the facilities operations and planning division.

That early planning led to the recent opening of a \$20 million composite repair facility, the first of its kind in the Department of Defense. North Island is now the Navy's principal repair point for the F/A-18. The facility continues to update other aspects of its technology in preparation for the Navy's eventual transition from F-14s to F/A-18s and any other aircraft in the Navy's future.

In addition to equipment, rework facilities must also determine the skills that will be needed to meet future demands—how many to hire and when. Because the facility is on the leading edge of aviation repair technology, it is often difficult to find the skills to match the demands of the technology. In many cases, NARFs are able to pick up talented people who leave the Navy in favor of civilian employment.

"When we lose people from the Navy who then go to work at a NARF, we're not really losing people—they're just transferring their knowledge, which helps everybody," said one aviator. In other cases, according to Severino, rework facilities have been forced to "grow" their own skills. Tony Cruz is an example

of that cultivation.

Cruz grew up just outside the facility's gates at North Island and came to work there shortly after serving a hitch in the Air Force. He started out as an aircraft mechanic apprentice and later became the first F-14 crew leader when the aircraft began arriving at the facility in 1976. Cruz has worked with F-14s ever since and he knows them inside out. He is now the acting F-14 program manager.

"It takes 177 working days, or about nine months, to put an F-14 *Tomcat* through a rework," said Cruz, who tracks each aircraft every step of the way. "It wouldn't be so bad if you had only one aircraft, but trying to keep 24 of them in the green..."

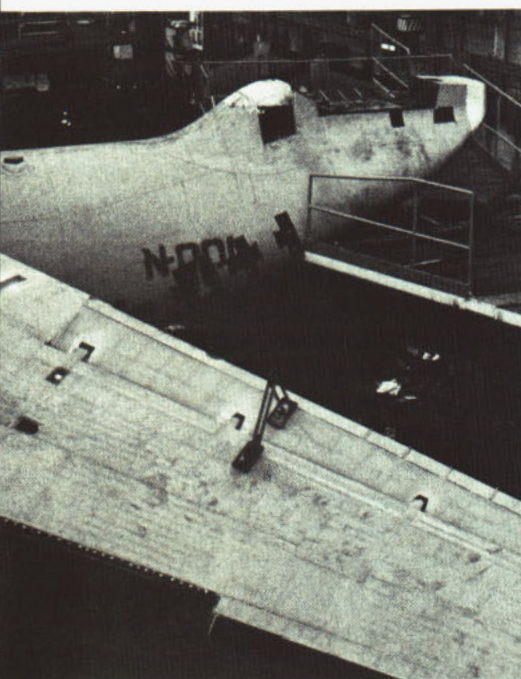
During the rework period, everything is on an intricate timetable. Scheduled maintenance must be performed, as well as countless inspections and repairs of unscheduled items. The aircraft is gone over with a fine-toothed comb to ensure that everything from hairline cracks in a fuselage to faulty bearings is discovered and repaired before the aircraft is returned to the fleet.

Despite all the planning and hard work they put into Navy aircraft, rework facility workers feel they suffer from an image problem in the fleet.

"You always get that odd airplane that's got something wrong with it when it gets back to the fleet. And people tend to remember the one that was wrong," said Giardina. "That's why communication is such a big thing. Sometimes you're putting out something that's making a guy unhappy and you don't even know it. If you knew it, you could change it."

The people at NARF North Island understand and are proud of their role in naval aviation. And although the rework process isn't perfect yet, they can rest on the fact that their facility returned 30 F-14s, 27 E-2Cs, 48 H-46 helicopters and 29 F/A-18s to service in the fleet last year. The process may not be perfect, but they've impressed a lot of pilots along the way. □

—Story and photos
by JOI(SW) E. Foster-Simeon



Bearings

Benefits for former POWs

More than half of the 142,227 U.S. servicemen and women who were held captive by enemy forces during four periods of conflict dating back to 1917 are alive today, according to the Veterans Administration.

The VA has made special outreach efforts to ensure that the more than 83,000 former prisoners of war (79,000 over 65) are aware of their benefits.

Legislative changes in 1981 and 1984 eased requirements for former POWs to establish service connection for certain disabilities. Veterans who were interned 30 days or more can be determined to have disabilities, presumed to be service-connected, from certain diseases.

The law says that military medical records do not cover periods of incarceration, but there must be some medical evidence relating an individual's present condition to the period of military service.

Treatment is available at VA's 172 medical centers and 226 outpatient clinics nationwide. Treatment in non-VA facilities at government expense is not autho-

rized unless the veteran has received prior approval. The recent 3.1 percent cost-of-living rate adjustment increased monthly payments to \$1,335 for a veteran with 100 percent disability. The 50 percent rate was increased to \$388. Veterans rated at 10 percent now receive \$68 monthly.

Veterans rated at 30 percent or more qualify for a dependency allowance. Dependents of veterans rated 100 percent may qualify for educational assistance. Widows of veterans who rated 100 percent disability for 10 years before their death are eligible for dependency and indemnity compensation, as are widows of veterans whose deaths were service-connected. Amount of payment is based on the veteran's highest military grade.

Compensation entitlements apply to all service-connected disabled veterans and not just former POWs.

VA facilities have designated employees to coordinate benefits and services for former POWs. Additionally, a national toll-free hotline is available 24 hours a day: (800) 821-8139. ■

Concept shops for Navy Exchanges

Navy Exchanges will feature "concept shops"—new specialty fashion shops—with its spring fashion line. Included in the concept shops program will be women's petite and full-figure sizes and a specialized young men's shop for those in the mid-twenties and under age range, with looks that are trendy and "in".

Women's petite and full-figure shops will be in selected Exchanges worldwide. With many name-brand and top designer fashions ranging from Cherokee, Ship 'n Shore, Lady Devon, and Lady Manhattan to Evan Picone, Gloria Vanderbilt, Liz Claiborne, and Lloyd Williams.

The young men's shops will feature the "Miami Vice" look and will show the latest fashion trends and feature clothing

labels such as Ocean Pacific, Pier Connection, Union Bay, Surf Line, and Generra. Young men's shops will be introduced in Exchanges at Naval Stations Charleston, S.C., Mayport, Fla., Norfolk, Va., San Diego, at Naval Air Station Alameda, Calif., and at Naval Training Center Great Lakes, Ill.

The move toward specialty fashion areas began in the early 1980s in Navy Exchanges and the development of concept shops is an enhancement of that program. Big and Tall Men's Shops have been tested for the past year at Naval Amphibious Base Little Creek, Va., and Naval Station Miramar, Calif., and this specialty area will be expanded this fall. ■

Ships' deck logs

The official logs for Navy ships in service before June 1945 are being stored in the National Archives in Washington, D.C.

Every U.S. Navy ship keeps an official log—an hour-by-hour record of operations and activities and people. Visitors can look up a ship's role in some major world event or search for the day a Navy ancestor or living relative reported aboard. For a small fee, photo-copies will be made.

The Archives will issue research permits at the door to grant access to ships' logs. ■



Photo by JO2 Rhonda A. Vinzant

Lt. Mary L. Ritz, a dentist aboard USS Acadia (AD 42), shows off the Norma Batchelder Award she received in February. The award is presented annually to individuals who show exceptional community service in San Diego. Ritz has been active in the American Heart Association, the American Red Cross, the North County Emergency Cardiac Care Unit, and an instructor trainer in basic life support which includes CPR—cardiopulmonary resuscitation.

Community service has been recognized by the Chief of Naval Operations as an important aspect of personal excellence in the Navy. ■

Job-related trivia

What did J. Robert Oppenheimer, chief scientist of the Manhattan Project, say after the Hiroshima and Nagasaki bombings?

What two materials may be used to seize nylon rope ends?

What is RDX—a chemical mixture of different explosives—coated with?

How thick should a drum's concrete liner be when packaging contaminated materials?

If you can answer these questions, chances are you're well-versed in the nuclear weapons field and rate with the experts in a new game—"Pursuit of Excellence".

The game, created by Senior Chief Weapons Technician Arnold K. Jorgensen, an instructor at Nuclear Weapons Training Group, Pacific, NAS North Island, Calif., is used as a nuclear weapons training aid.

"I thought it would help make better and more qualified sailors if learning was tied in with a game," he said. The game originally was designed as an aid for a nighttime study group of E-6s going up for advancement. It attracted so much enthusiasm that Jorgensen developed questions for all levels of training.

The object of the game is to complete a Western Pacific cruise and collect five tokens by answering nuclear weapons-related questions. The game board is a color map of the Pacific Ocean with routes charted to various ports. Players can start at any port they wish and move their ships in any direction along the routes. The game is designed for three skill levels: basic for paygrades E-2 through E-5, advanced for E-6 through E-7, and expert for E-8 through E-9. Up to 14 people can play the game at the same time, and skill levels can be mixed in any game.

"There's a lot of personal competition. We've really had some people going—

digging out references and everything. If an instructor misses a question in his particular specialty, he gets ragged about it. No instructor misses a question a second time," Jorgensen said.

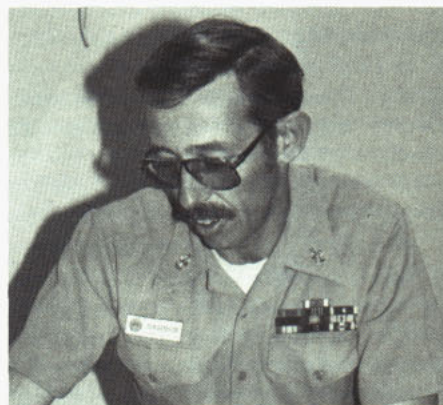
Many questions for the game came from a personal study guide that Jorgensen developed for 14 years, questions he has collected ever since he decided to strike for gunner's mate technician. He also uses nuclear weapons manuals for questions.

"I've been writing questions (for the game) for two years, and I'm by no means finished," Jorgensen said. "Most of the instructors here also have contributed to the game in one way or another."

"The game was specifically designed for gunner's mate technicians and the newly-created weapons technician ratings. Gunner's mates (missiles) who work on nuclear capable systems also can compete (in the game)," Jorgensen said.

"Similar games could be developed for other ratings. All it would take would be to write new questions."

The game, copyrighted since November 1985, is jointly owned by Jorgensen and the Navy, but it is not certain what they will do with the game. "We'd like an initial printing of 300 games to go to the fleet," Jorgensen said. "Navy Publications and Printing can do it, but funding



is another matter. To use the game as a training aid within the school is one thing, but mass production for Fleet-wide distribution is another."

If all goes well, perhaps one day the Fleet will have "Pursuit of Excellence" tournaments.

And for the answers to the questions?

"The physicists have known sin," said J. Robert Oppenheimer after the bombings of Japan.

Black electrical tape or nylon twine is used to seize nylon rope ends.

Beeswax is the coating on RDX.

The necessary thickness for a drum's concrete liner when packaging contaminated materials is 2.5 to 5 centimeters. ■

—Story by JOC Patricia E. Neal,
NTC San Diego, Calif.

NRL develops new antenna coating

A team of scientists from Naval Research Laboratory, Washington, D.C., has developed a fluorinated coating for naval antenna housings aboard ships. The coating, superior to that now used, sheds water more rapidly and retains its water-resistant capability after prolonged weathering.

The new coating was developed by Robert F. Brady, James R. Griffith, Larry Kraft and Donald Field, a former NRL employee.

In a field test, a ship's full antenna

housing was coated in December 1984. After more than a year, the coating is outperforming the epoxy coating now used. As a result, four more antenna housings have been painted with the fluorinated coating and are in service at sea.

When antenna housings get wet with rain or seawater, transmitting and receiving signals are diminished. This can interrupt or severely limit a ship's communications until the housing surface dries. ■

Mail Buoy

MiG chasing

I enjoy *All Hands* and believe that it performs a valuable service for Navy members and is probably a good recruiting tool as well. In order to help you to maintain the high quality of your magazine, I feel that I should bring something to your attention.

The article "From marathons to MiG chasing" from the November 1985 issue attracted my attention. As a naval aviator and a reservist, I am happy to see such material published. However, it distresses me to see an article which has several confusing elements of fact.

Tom Stewart is described twice as a flight officer and once as a pilot. The photograph depicts him on the pilot's step of an *Intruder*. For your information, "naval aviator" is the correct term for a pilot in the Navy, Marine Corps or Coast Guard. A naval flight officer is not a pilot. In the case of an A-6 *Intruder*, he is known as a bombardier navigator. Several Navy publications are lately mixing these terms indiscriminately, to the detriment of journalistic credibility and to the chagrin of many of us naval aviators.

I doubt that VF 0686 has *Intruders*. You probably really meant to print VA 0686.

Finally, Lt. Cmdr. Stewart's interception of a Russian MiG in the Arabian Sea seems to be such a rare event that it would warrant a major article by itself. More likely, the Russian aircraft was a *Bear* long-range patrol/reconnaissance plane. Did you use MiG just to go along with *Marathon* for a catchy title?

The journalistic community would save itself a lot of grief and reader rebuttals if it would adopt a common practice of calling someone in the know and reading to him a draft of proposed articles before going to press.

—Cmdr. Norman W. Birzer

♦ *We received our information from a Navy information office and have passed your observations along to them. For the record, the squadron in question was VA 0686 and Lt. Cmdr. Stewart is a flight officer. The photographer posed him on the pilot's step for lighting purposes. During his tour aboard Independence, Tom Stewart intercepted Iranian F-4s, Russian Mays and Russian Bears. It was not until his most recent tour, with USS Saratoga (CV 60) in March 1986, that he intercepted Russian-built MiGs (of the Libyan Air Force.)—ed.*

Time and distance

In reference to the February 1986 article "Where time begins," the statement "consider that at the equator four minutes equal one degree of longitude (68 miles)"—I hope that was a misprint. The fact is there are 2025.37182852 yards to a nautical mile, and when expressing distance in relation to longitude, you should use nautical miles as a standard.

One degree of longitude is 60 nautical miles. To convert from nautical miles to statute miles, multiply statute miles by .87.

It makes it hard when we teach our students in a classroom that one degree is 60 nautical miles, and then have them go on a break and pick up *All Hands* to read that it is "68 miles." There is some distortion at the equator, but (only) so much that a ship sailing 180 nautical miles on a chart will actually only go 179 nautical miles.

—QM1 Frank W. Dazey, NTC/SSC QMA School, Orlando, Fla.

Correction

The story "Mercy comes on line," page 27 of the March 1986 *All Hands* issue, was written by JO2 Barry Seymour of the Navy Public Affairs Center, San Diego.

Reunions

♦ **USS Lark AM 21 (ATO 168)**—Reunion June 12-15, 1986, Albuquerque, N.M. Contact Kenneth F. Marsh, 5330 South Sherman, Littleton, Colo. 80121; telephone (303) 781-5929.

♦ **USS Amsterdam (CL 101)**—Reunion June 17-20, 1986, Amsterdam, N.Y. Contact Bob Tripp, 26 William St., Hornell, N.Y. 14843.

♦ **USS Whitehurst (DE 634)**—Reunion June 19-21, 1986, Knoxville, Tenn. Contact Jon W. Shaver, 104 N. Oxalis Dr., Orlando, Fla. 32807.

♦ **Jonathan M. Wainwright School**—Reunion June 21, 1986, Dallas. Contact Joy Harper Bryant, 7240 Wabash Ave., Dallas, Tex. 75214; telephone (214) 327-7894.

♦ **USS PCS 1389**—Reunion June 27-29, 1986, Norfolk, Va. Contact Leonard Tampone, 99 E. 7th St., Deer Park, N.Y. 11729; telephone (516) 667-6184.

♦ **NMCB 9**—Reunion June 28, 1986, Port Hueneme, Calif. Contact V.V. Rebinskas,

1541 Park Ave., Port Hueneme, Calif. 93041.

♦ **USS Patterson (DD 392)**—Reunion June 29-July 4, 1986, Philadelphia. Contact Jack Slack, 6 Dogwood Lane, Lincroft, N.J. 07738; telephone (201) 842-9322.

♦ **USS McGowan (DDG 78)**—Reunion July 11-12, 1986, Cincinnati. Contact Don Rogers, 30 Hurd St., Lynn, Mass. 01905.

♦ **USS Diphda (AKA 59) World War II Veterans**—Reunion July 1986, Providence, R.I. Contact Tom Coogan, 12185 Ford Line, Southgate, Mich. 48195.

♦ **USS Melvin (DD 680 or DD 335)**—Reunion July 18-20, 1986, Hibbing, Minn. Contact Henry Rosypal, 316 E. Vine St., Millville, N.J. 08332; telephone (609) 825-0280.

♦ **Task Group 77.4.3 (Taffy III) Samar, Philippines 1944**—Reunion July 18-20, 1986. Contact Dick Nichols, 216 Taft Ave., Endwell, NY 13760.

♦ **UDT/SEAL**—Reunion July 18-20, 1986, USNAB, Little Creek, Va. Contact Fraternal Order of UDT/SEAL, P.O. Box 5365, Virginia Beach, Va. 23455.

♦ **USS Idaho (BB 42) Association**—Reunion July 23-26, 1986, Tacoma, Wash. Contact Dave Graham, P.O. Box 11247, San Diego, Calif. 92111.

♦ **USS Ranger (CV 4)**—Reunion July 25-26, 1986, Lancaster, Pa. Contact George Pyle, 8629 Oakleigh Rd., Baltimore 21234; telephone (301) 668-0260.

♦ **USS American Legion (APA 17)**—Reunion Aug. 28-30, 1986, Boston, Mass. Contact John N. Zuella, 6026 Ketchum Ave., Newfane, N.Y. 14108; telephone (716) 778-8034.

♦ **USS Eaton (DD 510)**—Reunion Aug. 7-11, 1986, Coralville, Iowa. Contact Barbara Gorvin, R.R. 1, Box 165, Oxford 52322; telephone (319) 628-4925.

♦ **VAQ 33 Connie Crew**—Planning a reunion, summer 1986. Contact Bryan L. Runion, 695 Kurtz Road., Marietta, Ga. 30066; telephone (404) 952-7524.

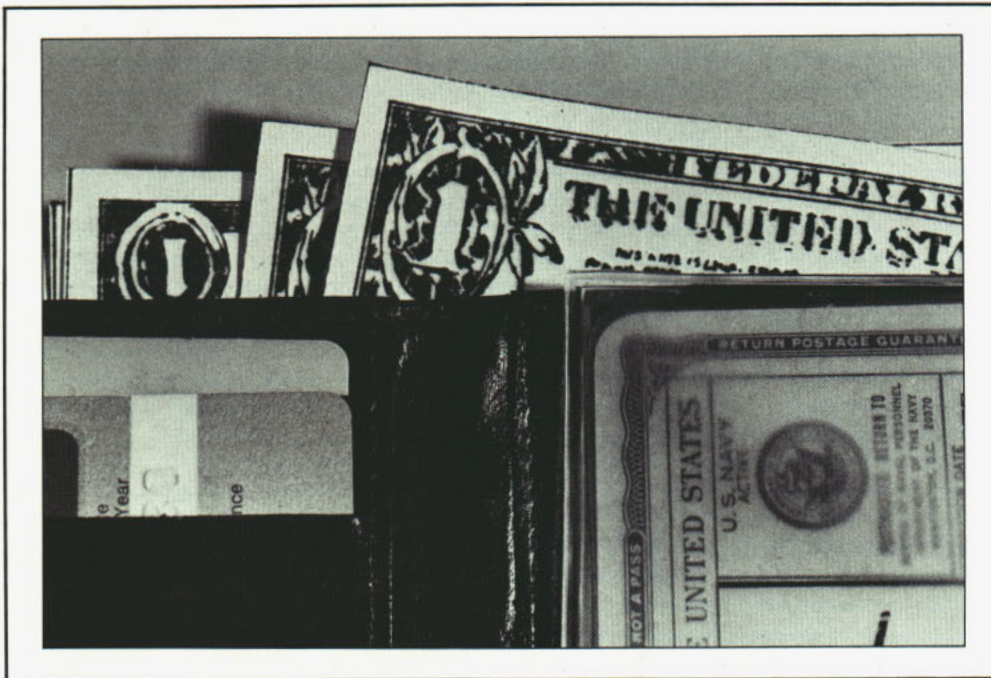
♦ **USS Karnes (APA 175)**—Planning a reunion. Contact Edward S. Quinn, 2412 Woodcroft Road, Baltimore, Md. 21234.

♦ **USS Gen. W.A. Mann (AP 112)**—Planning reunion, fall 1986, for crew members who served between 1943-1966. Contact Gerald J. Bligh Jr., 54 Fernview Ave., North Andover, Mass. 01845; telephone (617) 685-1628.

♦ **USS Bradford (DD-545)**—Planning a reunion, fall 1987. Contact Verne Bergeson, Secretary-Treasurer, USS *Bradford*, P.O. Box 491, Hartland, Minn. 56042.

3

Navy Rights & Benefits



Pay and Allowances

Pay and Allowances

Military compensation is composed of pay, allowances, retired or retainer pay, and benefits such as medical care, commissary and exchange privileges and leave. This article will cover only active duty pays and allowances which consist of Regular Military Compensation (RMC), special and incentive pays and other allowances.

Each element of the entire military compensation package is authorized by specific legal authority, generally in Titles 37 and 10 of the United States Code. These elements are either legal "entitlements" earned by the member or are discretionary under the law, meaning that the Secretary of the Navy has the option to determine the amounts and conditions of payment. Most bonuses, because they are generally designed to address specific manning or retention and incentive pays, are discretionary. Whereas all elements of "pay" are fully taxable, most allowances are not because they are treated in principle as reimbursements for certain expenses (housing, subsistence, travel, etc.).

RMC is important for two reasons. First and foremost, RMC is considered the equivalent of a military "salary," applicable to all members of the uniformed services. Secondly, RMC is the basis for comparing the levels and adequacy of military with civilian pay levels. The elements of RMC are basic pay, basic allowance for quarters (including the variable housing allowance authorized for members living in high cost locations), basic allowance for subsistence and the tax advantage which accrues because of the non-taxability of these allowances.

Basic Pay

Basic pay varies according to a member's paygrade and time in service. The amount is prescribed by law. Navy people receive longevity increases at various times throughout their careers.

Each member's annual salary is divided into 12 equal installments, one-half of each installment payable on the 15th and the other on the 30th of every month. Each installment represents the pay for one

calendar month. The daily rate is one-thirtieth of the monthly rate.

The allowances which make up the rest of RMC are Basic Allowance for Quarters (BAQ), Variable Housing Allowance (VHA), and Basic Allowance for Subsistence (BAS). By tradition, custom and law, the government provides service members with quarters and subsistence. When quarters and subsistence are not provided, a monthly allowance may be paid to the service member to help meet the cost of those needs. In almost all cases, eligibility for allowances and special and incentive pays is first contingent on eligibility for basic pay. Thus a member not entitled to basic pay is generally not entitled to any other pays or allowances.

Basic Allowance for Quarters

A member is entitled to BAQ when adequate government quarters are not available or assigned to the member and his/her dependents, if applicable. The amount of BAQ varies with paygrade and dependency status. BAQ rates for fiscal year 1985 were realigned to reflect 65 percent of the national median housing costs appropriate for a member's paygrade and dependency status. For fiscal year 1986, this formula was temporarily abandoned in favor of a 3 percent across the board pay raise effective Oct. 1, 1985.

The BAQ entitlement for service-married couples (ie. two service members married to each other) is extremely complex. Because the law prohibits a service member from being considered a dependent for allowance purposes, each member of a service-married couple is considered "single" (a member without dependents for BAQ purposes) in the absence of other qualifying dependents (children, parents, etc.). In this case, each member is entitled to BAQ in his/her own right.

For service-married couples with dependent children (whether by the current or a former marriage) the Comptroller General of the United States has ruled that, unless separated by military orders, only one member may receive BAQ at the

"with-dependents" rate. The other will be considered a member without dependents for BAQ purposes. The rationale behind this decision is that the natural children of one member of a service member marriage are also eligible to be considered dependents (stepchildren) of the other member; hence, the Comptroller General has determined that all children will be considered the dependents of only one member of the service-married couple. This applies regardless of the location of the dependents. However, when the two service members are separated by military orders, each member may be eligible for BAQ at the "with-dependents" rate in his/her own right, if he/she has dependent children from a former marriage.

The law also permits a member without dependents who is in paygrade E-7 or above to elect not to occupy government quarters appropriate for his/her grade and receive a BAQ and VHA, if appropriate. This includes shipboard quarters. Eligible members who elect to not occupy shipboard quarters can now retain private quarters and receive BAQ for the entire

**Basic Allowance for Quarters
(Effective Oct. 1, 1985)**

Pay-grade	Without Dependents	Partial Rate	With Dependents
O-10	553.50	50.70	680.70
O-9	553.50	50.70	680.70
O-8	553.50	50.70	680.70
O-7	553.50	50.70	680.70
O-6	507.90	39.60	617.40
O-5	479.40	33.00	568.80
O-4	439.50	26.70	519.90
O-3	355.80	22.20	433.50
O-2	286.50	17.70	371.70
O-1	245.70	13.20	333.30
W-4	402.90	25.20	467.40
W-3	340.20	20.70	418.20
W-2	306.00	15.90	390.90
W-1	258.90	13.80	340.80
E-9	324.90	18.60	442.80
E-8	300.90	15.30	412.50
E-7	256.80	12.00	383.70
E-6	228.00	9.90	348.00
E-5	210.90	8.70	309.30
E-4	183.00	8.10	267.30
E-3	177.60	7.80	245.70
E-2	150.90	7.20	245.70
E-1	137.40	6.90	245.70

Pay and Allowances

duration of deployments. Members in paygrades E-6 and below assigned to shipboard sea duty and without dependents are presumed to be assigned to adequate quarters and are not entitled to BAQ.

A partial rate of BAQ is payable to members (without dependents) when they are assigned to government quarters; this is in order to not penalize them for reallocation of basic pay increases into BAQ.

Variable Housing Allowance (VHA)—A Variable Housing Allowance is paid to service members residing in certain high-cost areas in the continental United States, Hawaii and Alaska. VHA is usually based upon the service member's paygrade, dependency status, and duty station location. The Secretary of the Navy has the authority to pay VHA based on location of dependents in certain circumstances. VHA rates are established based upon service members' reported housing expenses in the VHA survey. These expenses include rent (or rental equivalency for homeowners), insurance, utilities and maintenance expenses. The accuracy of the rates for VHA depends upon the data received from service members in the VHA survey. VHA is paid in a locality when the Local Median Housing Cost (LMHC) exceeds 80 percent of National Median Housing Costs (NMHC). The BAQ is designed in concept to represent 65 percent of NMHC while the member pays (out of pocket) an amount equal to 15 percent of NMHC.

VHA Offset—On March 1, 1986, the VHA Offset program became effective. As directed in the FY 86 Authorization Act, the member's housing allowances for BAQ and VHA will be compared to the member's housing expenses. If the allowances exceed the expenses, the member's VHA will be reduced by an amount equal to one-half of the difference not to exceed the total VHA. All VHA may be lost but no BAQ can be lost.

Special and Incentive Pays

Special and incentive pays are additions to the RMC to compensate members for acquiring and/or possessing certain skills

or performing duties considered unusually arduous or hazardous. Special and incentive pays are taxable, and normally paid monthly, although most bonuses are paid on an annual basis. A rundown for the more common special and incentive pays follows.

Optometrists, Veterinarians—These officers receive a special pay of \$100 monthly, provided they are on full-time active duty for a period of at least one year.

Physicians—Depending on their particular medical specialty, these officers may receive up to four different special pays when they serve on active duty for a period of at least one year. All physicians receive a monthly variable special pay at rates from \$1,000 to \$10,000 per year, depending on years of creditable service. If the physicians possess a medical specialty in which they are board certified, they are entitled to an additional monthly pay at the rate of \$2,000 to \$5,000 per year. Medical officers who execute an agreement to extend for a period of one year are entitled to additional special pay in the amount of \$9,000 or \$10,000 if they have 10 or more years of creditable service. If they possess a skill designated as critically understaffed, they may receive up to an additional \$8,000 as an incentive for executing a one year extension agreement. Payments for one year extension agreements are made annually at the beginning of the agreement.

Dentists—The FY 86 DoD Authorization Act established a dental officer special pay structure similar to that of physicians. All dental officers are entitled to receive a monthly variable special pay at rates from \$1,000 to \$6,000 per year depending on the years of creditable service. If they possess a specialty in which they are board certified, an additional monthly payment at annual rates from \$2,000 to \$4,000 is authorized. A dental officer who executes an agreement to extend for at least one year is entitled to a lump sum payment of additional special pay in amounts ranging from \$6,000 to \$10,000, depending on years of creditable service.

Foreign Duty Pay—Foreign duty pay is

payable to enlisted members assigned to duty at specified places outside of the continental United States. The list of such duty stations is lengthy; a copy is in the Military Pay and Allowances Entitlement Manual. Foreign duty pay is not authorized for Navy people who are residents of Alaska, Hawaii, United States possessions, or foreign countries during any period they are serving within that locality.

Monthly Rate of Payment for Foreign Duty

E-9	22.50	E-6	20.00	E-3	9.00
E-8	22.50	E-5	16.00	E-2	8.00
E-7	22.50	E-4	13.00	E-1	8.00

Career Sea Pay (CSP)—This pay is designed to compensate eligible members for the arduous nature of shipboard sea duty. As such, it is payable to enlisted members in paygrade E-4 and above and officers who have accumulated more than three years of sea duty at monthly rates ranging from \$50 to \$410, depending on paygrade and years of cumulative sea duty. Cumulative sea duty only applies to shipboard sea duty and should not be confused with "sea duty for rotational purposes".

The rules and regulations for payment of CSP are contained in SECNAVINST 7220.77B. In general, CSP is paid to eligible members on a continuous basis when they are assigned to and serve in ships whose primary mission is accomplished under way (category A). It is payable to crew members of ships whose primary mission is accomplished in port (category B) only when those vessels are out of home port for at least 30 consecutive days.

In determining the years of consecutive sea duty, time served prior to Oct. 1, 1978, in units whose enlisted crew members were eligible for the former sea pay is creditable. After Oct. 1, 1978, only time actually served in category A or CSP qualifying category B ships may be counted. For members assigned to the off-crews of two-crewed submarines, off-crew time is fully creditable from Oct. 14, 1981, on.

In addition to the monthly base CSP, members eligible for CSP who have completed 36 consecutive months of sea duty

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are entitled to a CSP premium of \$100 per month.

Special Duty Assignment Pay—This pay replaced proficiency pay in FY 85. It is a monthly pay used to help obtain high quality personnel for designated special duty assignments involving demanding duties or an unusual degree of responsibility and then to sustain adequate manning levels. People serving in the designated skills may receive an additional \$55 to \$275 per month. Details of the SDAP program are contained in OPNAVINST 1160.2 series and OPNAVNOTE 1160.

Selective Re-enlistment Bonus—SRB is a retention incentive special pay awarded members serving in certain selected ratings/NECs who re-enlist or extend their enlistments for at least three years. The purpose of the bonus is to increase the number of re-enlistments in those ratings/NECs having insufficient retention.

SRB amounts of up to \$30,000 per bonus may be paid to enlisted members who are serving in critically undermanned ratings. A member may receive up to three bonuses, one for each eligibility zone — Zone A (for those with at least 21 months but no more than six years of service), Zone B (at least six but no more than 10 years of service) and Zone C (at least 10 but no more than 14 years of service). Details of the SRB program are contained in OPNAVINST 1160.1 series.

Hostile Fire/Imminent Danger Pay—All members serving ashore, aboard a ship, or in an aircraft within an area designated as a hostile fire or imminent danger zone are eligible to receive this pay at a rate of \$110 per month. Designated areas are specified in the Department of Defense Military Pay and Allowances Entitlement Manual.

Special Pay for Nuclear-Qualified Officers—This pay is comprised of three categories:

Nuclear Officer Accession Bonus: Naval officers or prospective naval officers, accepted for training for duty in connection with the supervision, operation and maintenance of naval nuclear propulsion plants, are entitled to an accession bonus of

\$4,000 when they meet all requirements listed in the entitlements manual and SECNAVINST 7220.65 series. Nuclear career accession bonus payment shall be \$2,000.

Nuclear Officer Continuation Pay: Nuclear-qualified naval officers are entitled to continuation pay when they elect to remain on active duty after completion of their initial obligated service. They will receive \$9,000 for each year of additional obligated service. Multiple agreements for three, four or five years (not to exceed 26 years commissioned service) are available.

Nuclear Career Annual Incentive Bonus: Nuclear-qualified officers who have completed initial obligated service and who are not serving under a continuation pay agreement, receive an annual incentive bonus of \$7,200 (URL)/\$3,600 (LDO/CWO).

Incentive Pays for Submarine Duty—There are two types of Submarine Duty Incentive Pay (SUBPAY)—Operational (OPSUBPAY) and Continuous (CONSUBPAY). OPSUBPAY is payable to both submarine-designated and non-submarine-designated personnel when assigned to and serving in submarines if not otherwise entitled to CONSUBPAY. CONSUBPAY is paid to active duty personnel who engage in and remain in submarine service on a career basis. Submarine career screening gates are established at the 12th and 18th year of submarine service to verify members are still eligible for CONSUBPAY based on total years of service.

The monthly rate of incentive pay for enlisted members ranges from \$55 to \$265; for warrant officers, \$175 to \$265; and for officers, \$130 to \$440. Each rate of pay is determined by paygrade and years of service based upon pay entry base date.

Command Responsibility Pay—In order to recognize the unusual responsibilities of operational commanders relative to their peers of the same grade, Navy pays \$50 to \$150 per month responsibility pay to officers in operational command of fleet units in paygrades O-3 through O-6.

Aviation Career Incentive Pay (ACIP)—ACIP is an incentive pay for aeronautically rated/designated officers and warrant officers (pilots/naval flight officers). Rates

range from \$125 to \$400 monthly and are based on years of aviation service, until the 18th year of commissioned service. At that point, rates begin decreasing for officers only, to \$250 per month during the 25th year of commissioned service. Rates for warrant officers remain at \$400 per month.

ACIP may be paid on a continuous or conditional basis. It is paid on a continuous basis provided that the aviator passes certain milestones or gates at the 12th and 18th years of aviation service. To receive ACIP on a continuous basis, through the 25th year of commissioned service, the aviator must have served 11 of the first 18 years of aviation service in operational flying billets. Aviators not eligible for continuous ACIP and flight surgeons may receive conditional ACIP if they are assigned to an operational flying billet and fly at least four hours per month. All aviators and flight surgeons must be physically qualified to receive ACIP and are required to undergo an annual flight physical within 30 days of their birthday. Failure to take an annual flight physical within the prescribed period may cause suspension of ACIP, regardless of primary duty.

Aviation Officer Continuation Pay (AOCP)—AOCP is a continuation pay payable to certain naval aviators, in critically undermanned aviation communities, who execute extension agreements for three, four or six years of additional service. Normally, aviators who execute an AOCP agreement receive a lump-sum annual payment of \$4,000 for a three-year contract, or \$6,000 for a four- to six-year contract. An aviator who receives AOCP, however, receives a reduced amount of monthly ACIP (\$306 instead of \$400) for the duration of his contract and is not eligible to receive flight deck hazardous duty incentive pay, even if otherwise eligible, during the contractual period. These restrictions are removed once the contract period expires. Eligibility criteria for AOCP are announced annually and are based on a minimum number of years of aviation service, a maximum number of years on active duty and specific Aviator Qualification Designator (AQD) codes

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determined by the Secretary of the Navy.

Special Pay for Diving Duty—Officer and enlisted members who are qualified divers, assigned to billets requiring the performance of diving duty and who actually perform diving duty are eligible to receive diving pay in amounts ranging from \$110 to \$300 per month. Rates of diving pay are determined by the type and degree of diving qualifications the member possesses. A member who receives diving pay is restricted from receiving more than one Hazardous Duty Incentive Pay (HDIP).

Hazardous Duty Incentive Pays (HDIP)—There are six different types of hazardous duty incentive pays paid at the rate of \$110 per month for both officers and enlisted members which are designed to compensate members for participating in duties considered unusually hazardous.

Non-crew member flight pay: Payable to members required to participate in aerial flight to perform their duties (not as passengers), who are not designated as crew members.

Parachute duty pay: Payable to members when parachute jumping is required as an essential portion of their duties. An additional \$55 per month is payable to members required to perform High Altitude, Low Opening (HALO) parachute jumps as an essential part of their duties.

Demolition duty pay: Payable to members required to perform demolition of live explosives, including training, as a primary duty.

Flight deck duty pay: Payable to members required to participate in flight deck operations, from an air-capable ship, on a frequent and regular basis. A member who receives flight deck duty pay may not receive another HDIP.

Experimental stress pay: Payable to members required to perform any of the following duties: as the subject in thermal stress experiments; duty in high or low pressure chambers as a human test subject, inside instructor or observer, or research technician.

Toxic material pay: Payable to members performing primary duties involving frequent and regular exposure to: highly toxic

pesticides; live, dangerous viruses and bacteria in laboratory work; certain highly toxic fuels or propellants used in aircraft or missile systems; and certain chemical munitions.

An additional HDIP payable to Navy members is crew member flight pay. This is payable to both officer and enlisted members, designated as crew members, who are required to participate in aerial flight on a frequent and regular basis. Rates vary by paygrade and range from \$110 to \$250 per month.

Overseas Duty Extension Pay—Enlisted personnel who agree to extend their tours of duty at certain overseas locations may be eligible to receive special pay at the rate of up to \$80 per month. Instead of this pay, the member may elect to receive a rest and recuperation absence or transportation at government expense during the extension period. Details of this program are found in OPNAVINST 1306.1.

Other Allowances

Allowances are paid to help Navy people meet expenses incurred while on active duty. Allowances may be paid monthly or on an occasional basis, or in a one-time lump sum payment. Some are paid automatically, others require application to be made. Allowances are not taxable.

Enlisted Clothing Allowances—Members receive an initial clothing allowance when they enter the service or are recalled to active duty; after six months of active duty, they receive a replacement allowance. There are several types of clothing allowances, based on the actual cost of clothing and situations in which special clothing may be needed. Clothing allowances are usually revised on an annual basis with new allowances effective October 1 of each fiscal year. The amounts of the allowances are listed in the annual update to DoD Directive 1338.5.

Initial Clothing Monetary Allowance (ICMA): ICMA generally reflects the cost of a complete sea bag for recruits and for enlisted men and women, and is usually paid "in kind" in the form of a full sea

bag issued at recruit training commands.

Partial initial clothing monetary allowance for enlisted members of the Naval Reserve below E-7 (male and female): This allowance reflects the cost of completing a sea bag for reservists upon reporting for active duty.

Basic replacement allowance: This is an annual allowance paid in a lump sum on the member's anniversary after six months of active duty and until completion of three years' active duty.

Standard replacement allowance: This annual allowance is paid after three years' active service in a lump sum on the member's anniversary month.

Special initial clothing monetary allowance: This allowance is for those who must wear clothing of a type not required by the majority of Navy men and women. It goes to men and women upon advancement to chief petty officer, for instance. Rates vary depending on the situation, and payment is made in a one-time, lump sum.

Civilian clothing monetary allowance: Certain Navy people who are required (not having the option) to wear civilian clothing in performance of their duties, such as people serving in politically sensitive areas overseas, where the appearance of a military uniform could be a source of disruption. The lump sum payment depends on the seasonal civilian clothing involved. Additional payments may be made for extended tours of duty.

Special enlisted supplementary clothing allowance: This allowance is paid to certain enlisted members whose duties require the purchase of additional uniform items. The amounts of this allowance and the duties for which it is payable are specified in the Department of Defense Military Pay and Allowances Entitlement Manual.

Officers' Uniform and Equipment Allowances—Initial uniform allowances for officers range from \$100 to \$300 depending on source of procurement (OCS, NROTC, etc.) and are payable upon first reporting for active duty—other than training—for a period of more than 90 days; upon completing 14 days active duty or active duty for training; or, when an

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officer is commissioned in a regular component upon NROTC graduation or enters on active duty as a regular naval officer.

Family Separation Allowance—This allowance is payable only to members with dependents. There are two types of FSA – Type I and Type II. A member may be entitled to both types simultaneously.

FSA Type I was designed to pay a member for added housing expenses caused by enforced separation from dependents. It applies when Navy people must maintain a home for their dependents and one for themselves when on permanent duty outside the United States. It is not payable to a member permanently assigned to a duty station in Hawaii (but is payable to members serving in Alaska) or to any duty station under permissive orders (orders taken at no cost to the government).

To qualify for this allowance, which is equal to one month's BAQ at the without-dependents rate for the affected paygrade, the following general conditions must be met: transportation of dependents to the permanent duty station is not authorized at government expense; dependents do not live at or near the permanent duty station; adequate government quarters are not available for assignment to the member and the member is not assigned to inadequate government quarters or housing facilities.

FSA Type II was designed to compensate Navy people for added expenses incurred because of enforced separation from dependents due to permanent change of station, duty aboard ship, or temporary duty away from permanent command. Any member may receive \$60 per month when any one of the following general requirements are met: transportation of dependents is not authorized at government expense and dependents do not live at or near the new permanent duty station or home port; member is on duty aboard a ship which has been away from its home port for more than 30 consecutive days; member is TDY or TAD away from his or her permanent station for more than 30 consecutive days and dependents do not live at or near the temporary duty station.

Dislocation Allowance—Navy members may be entitled to a dislocation allowance equal to one month's BAQ when the member is transferred under PCS orders.

Members with dependents must actually relocate their families with the intention of establishing a bona fide, permanent residence. Members without dependents or members who do not relocate their dependents are entitled to this allowance at the without-dependents rate if they are not assigned government quarters at their new permanent duty station. Dislocation allowances are not automatically paid—members must apply at the disbursing office after arrival at the new duty station.

Station Allowances—When assigned to duty overseas, members may become eligible for station allowances, depending on a variety of factors such as location of assignment, nature of orders, dependency status and the overseas housing and cost-of-living situation. Station allowances are paid to those on duty outside the continental United States to offset any loss of purchasing power that occurs when stationed overseas. The Overseas Housing Allowance (OHA) is not payable in Hawaii and Alaska to service members reporting for duty after Nov. 8, 1985. Members stationed in Hawaii or Alaska receiving OHA or Temporary Lodging Allowance (TLA) prior to Nov. 9, 1985, are grandfathered under the Overseas Housing Allowance Program (newly reporting personnel are covered by the Variable Housing Allowance system). The allowances are authorized by the per diem committee based on costs reported in overseas areas as compared to costs in the continental United States. Joint Travel Regulations, Volume 1, contains specific instructions concerning the payment of station allowances. Application for these allowances is required, and, in view of varying conditions and rates, members should check with their disbursing officer to determine entitlement. Station allowances are reviewed at least yearly and are subject to change at any time. Generally, the station allowances are as follows:

- Overseas Housing Allowance (OHA)

and Cost of Living Allowances (COLA): These help defray the excess costs members face while on permanent duty overseas. OHA provides an allowance based on the difference between the member's BAQ or the Family Separation Allowance – Type I, whichever is applicable, and the actual rent established for each area. In addition, there is a supplemental payment, consisting of average utility and initial/terminal occupancy costs for each area concerned. The monthly utility costs have been determined by averaging the utility expenses for members in a particular location. The monthly initial/terminal occupancy expense has been predetermined by prorating the average "moving in" and "moving out" expenses for members in a particular location over the average length of time they reside in economy housing at their location.

- COLA is based upon the location of the member's permanent duty station, the member's rank and years of service, and the number of dependents authorized to be present at the overseas duty station.

- Interim Housing Allowance (IHA): This type of allowance may be paid when a member assigned overseas is required to contract for non-government, family-type housing before dependents arrive. An IHA is an amount determined by location, which may be paid for 60 days or until the member's dependents arrival in the vicinity of the member's permanent duty station, whichever is earlier.

- Temporary Lodging Allowance (TLA): TLA is designed to partially reimburse members for extra expenses incurred when living in hotel-type accommodations while awaiting permanent housing after reporting overseas. Also, it may be paid to members awaiting transportation back to the United States after receipt of PCS orders. Although there are provisions for extensions of TLA, the allowance is not usually paid for periods of more than 60 days after reporting to a foreign duty station or for more than 10 days when leaving an overseas station. Daily TLA rates are determined by multiplying a given area's travel per diem allowance by a per-

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centage factor based on the number of dependents accompanying a member to the overseas duty station.

Travel Allowances—There are a number of travel situations a member might face while on active duty for which the Navy will pay expenses or will, in most cases, reimburse the member with appropriate travel allowances up to the limits permitted by law. Generally, any time a member travels under orders (other than leave orders), the Navy pays for transportation. If a member has dependents, the member's family may travel at government expense when under PCS orders. Dependents may also travel at government expense when a member receives orders in connection with schooling for more than 20 weeks.

The member's dependents, while traveling in connection with a PCS move, are entitled to per diem. Dependents 12 years and older receive a per diem of three-quarters the amount a service member would receive per day, while dependents under 12 receive one-half of the service member's amount per day.

A PCS mileage allowance is available for the member and/or dependents traveling in a privately-owned conveyance (POC) on a permanent change of station move. The rate is 15 cents per mile for one person traveling in the POC, 17 cents for two persons, 19 cents for three persons, and 20 cents per mile for four or more persons.

Because travel allowance computations are complex and the number of allowances authorized varies with each situation, Navy people should check with their personnel and disbursing office each time they receive transfer or travel orders. Personnelmen and disbursing clerks are experts in the computation of travel allowances and are willing to help members file their travel claims.

Temporary Lodging Expense (TLE) is designed to partially reimburse lodging and subsistence expenses of the member and/or dependents in connection with moving out of permanent quarters in the continental United States at the old station and prior

to moving into permanent quarters at the new station. TLE will pay up to a maximum of \$110 per day for up to a maximum of four days. Specific rules are contained in the Joint Travel Regulations, Volume 1.

Lump Sum Leave Payments—Upon discharge, transfer to the Fleet Reserve or retirement, members may receive cash for accumulated leave, up to a maximum of 60 days. Settlement for leave accrued as of Aug. 31, 1976, commonly referred to as "saved leave," will include basic pay, BAQ, BAS, and PMA (Personal Money Allowance) as appropriate. Settlement for leave accrued after that date will include basic pay only. Effective Feb. 10, 1976, a military member can be paid no more than 60 days' accrued leave during an entire military career. Payment for accrued leave made before Feb. 10, 1976, is excluded from this limitation. A member eligible for an accrued leave settlement may elect to receive payment for a portion of the accrued leave, not to exceed 60 days, and have the remaining accrued leave carried forward to a new or extended enlistment. Table 1 on page 46 (see 4-4.1 through 4-4.4 of the DODPM) explains the conditions for payment of accrued leave.

Personal Statement of Military Compensation (PSMC)—At Congressional direction, each service member should receive a PSMC annually. The PSMC details the value of the entire military compensation package accruing to the member. In addition to RMC, the PSMC includes special and incentive pays and allowances and provides the member with the ability to estimate the monetary value of certain non-monetary benefits. In addition to providing a clearer picture of the entire military compensation package, the PSMC provides the member with a document to assist in establishing eligibility for loans or mortgages, and in comparing his or her compensation to private sector wages.

Allotments of Pay

Allotments are big business in the Navy today. Thousands of civilian and Navy

disbursing clerks around the world ensure that Navy members' allotments do what they're designed to do. Currently, there are 12 types of allotments in general use. Examples of these are clearly shown in Table 2, Examples of Allotments of Pay, with Applicable Codes on page 47.

It is important for Navy people to realize that their dependents, or others to whom allotments have been made, do not receive an allotment check immediately after application has been made. The check is not mailed until the end of the month for which it is payable. Generally, the minimum time required for allotments to reach payees is five to eight weeks after the member has completed the application which places the allotment in force.

Each month the Navy Finance Center receives a number of letters from dependents who report they did not receive a scheduled allotment check. In almost every instance, failure to receive an allotment check on schedule can be traced to the failure of an active duty member to notify the center of a change of address. Navy men and women should remember that when they move and wish to receive a check at the new address, they must notify NFC before the 16th of the month.

The center suggests members use the regular change of address cards sent periodically to allotment payees for this purpose. To be on the safe side, it is also suggested that a change of address notice be filed at the local post office so the allotment check will be forwarded.

The Finance Center's Job

Handling the financial affairs of Navy people is the job of the Navy Finance Center in Cleveland, Ohio, and regional and local finance offices located aboard ship and around the globe. They handle such diverse areas as re-enlistment bonuses, entitlement claims, leave accounting, travel, allotments and so on. In recent years, two developments have made this job more efficient and more economical—JUMPS and PASS.

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Table 1. Computation of Accrued Leave Payment

R U L E	If member is	and member has	then compute payment for the number of days accrued leave, but not more than 60 in a military career, to include: (note 1)			
			Basic Pay	BAS	BAQ	Personal Money Allowances (note 6)
1	enlisted, in paygrades E-5 to E-9	dependents (note 3)	at rate applicable on date of separation (notes 2 and 4)	70 cents per day	\$1.25 per day	none
2		no dependents			none	
3	enlisted, in paygrades E-1 to E-4				none	
4	officer	dependents (note 3)	at rate applicable on date of separation (prorate for number days of accrued leave)	at rate applicable for member with dependents on date of separation (notes 4 and 5)	if officer was receiving this allowance on date of separation (limited to allowance authorized by paygrade and billet). Compute at rate payable on that date (note 4).	
5		no dependents				

NOTES: (1) When the final leave balance includes a one-half day total, compute the amount to be paid by crediting the member with one-half of a day's entitlement. Round the total to the nearest penny. (2) Do not include in basic pay the 25 percent increase authorized certain Navy members involuntarily retained beyond their EAOS. (3) A dependent on active duty is not considered a dependent in determining right to BAQ. (4) Date of separation is date of discharge, release from active duty, transfer to reserve, or death, day before effective date of retirement, day before date of appointment as cadet or midshipman, or day before effective date of extension of enlistment. (5) Pay BAQ even though member is not receiving BAQ on date of separation because public quarters are occupied or available. (6) Cash settlement of leave accrued as of Aug. 31, 1976, will be on the basis of basic pay, BAS, BAQ, and PMA as appropriate. Cash settlement of leave accrued on and after Sept. 1, 1976, will be on the basis of basic pay only for all grades, officer and enlisted.

JUMPS (Joint Uniform Military Pay System)

This system has been in operation fleet-wide since 1977. It provides accurate and timely fiscal information with which to better manage the Military Personnel Pay Appropriation. Before JUMPS, forecasting pays and obligations for the pay appropriation was only a historically-based "guesstimate" since pay was calculated and paid by more than 500 disbursing offices afloat and ashore. Because many of the Navy people who are deployed prefer to let their pay accumulate "on the books" and pay records were closed out only twice a year, it took months for the Navy to determine how much it was actually spending on personnel costs.

Under JUMPS, the Navy's 500 field disbursing offices still hold payday twice a month, but everyone's pay is calculated in Cleveland, well in advance of actual payment. This accrual approach permits the service to obligate the MILPERS appropriation on a much more timely basis than previously possible. Disbursing offices in the field continue to make pay record changes to reflect promotions and other pay entitlement changes occurring between Cleveland's calculation and the actual payday, but the next NFC calculation reflects those changes in each member's new Leave and Earning Statement (LES).

The monthly LES issued to Navy men and women provides an up-to-date financial tool which can be used in planning since it provides complete information

about pay entitlements, allotments, deductions and taxes. So that Navy people will recognize the full value of their pay and allowances, the "remarks" block on each LES periodically explains the dollar value gained as a result of non-taxable allowances.

An LES looks confusing at first glance, yet it is actually very simple to decipher. A key on the reverse side of each LES explains what the entries in each block mean. Here are some added tips for reading LESs:

In blocks 26-32 (Allotments), a one-letter code indicates the type of allotment—e.g. "D" for dependency or "S" for savings. If a person has more than six allotments, the additional ones appear in block 62 (Remarks). If the allotment is to be stopped at the end of the month, its termination date will appear in the remarks block.

Block 57 (Forecasts of amounts due) will reflect longevity increases coming up soon, or any other action affecting pay. Designed as a financial planning tool, block 57's forecasts of amounts due may differ occasionally from actual pay received because of local adjustments based on the most current entitlements.

Block 62 (Remarks) will contain a brief description of events which affect a member's pay. For example, "LSL PAID TO DATE 0.0DA" indicates that the member has not sold any "lump sum leave" back to the Navy and is, therefore, entitled to sell 60 days upon re-enlistment, discharge or retirement.

PASS (Pay/Personnel Administrative Support System)

The PASS program was initiated to provide Navy personnel with one-stop pay, personnel and Navy-sponsored passenger transportation services and improve pay and personnel administration between the headquarters and field activities. When fully implemented and automated, PASS will be the mainstay in the field for support of the overall Personnel and Pay Systems (PERSPAY). The PERSPAY initiative is an ongoing effort to consolidate all head-

quarters pay and personnel data bases for naval personnel into a single Consolidated Data Center (CDC) and serve as one source for all pay and personnel systems within the United States Navy.

The PASS Program is a three phased effort:

- Phase I: *Consolidation and Colocation of the pay, personnel and transportation offices in the shore establishment.* With the exception of some personnel offices supporting inactive reserves, consolidation is complete for the shore establishment. Currently there are 25 Personnel Support Activities (PERSUPACTs) with 157 Personnel Support Activity Detachments (PERSUPDETs) in the PASS network. The colocation efforts continue as military construction funding becomes available through the Navy budget system.

- Phase II: *The automation of PASS field activities.* The Source Data System (SDS) has been developed and is currently implemented in two PERSUPACTs in CONUS. The follow-on implementation schedule calls for total implementation of the CONUS and overseas PASS network by 1990. SDS is automating the way PASS conducts the day-to-day operations and provides a direct link with the Naval Military Personnel Command in Washington, D.C., and the Navy Finance Center in Cleveland, Ohio. The system contains edits to ensure more accurate data to headquarters and a timely two-way communications network. It also provides management reports to be used to track events and/or monitor individual and activity performance.

- Phase III: *Development of a follow-on system that provides for full integration of PASS for all Navy personnel.* A number of fleet and mobile units are currently in PASS with the remainder to be programmed as PASS becomes fully automated. The Source Data System Afloat (SDSA) is being developed and tested as part of the Shipboard Non-Tactical ADP Program (SNAP I & II). This system will perform the same functions as SDS does ashore and will provide automated support for designated fleet units with SNAP I &

Table 2. Examples of Allotments of Pay, with Applicable Codes

When the purpose of allotment is	and member is			or is retired member not on active duty	then the period of the allotment is
	officer	enlisted	aviation officer candidate		indefinite definite
B—purchase of U.S. Savings Bonds	X	X	X	X	X
C—charity drive donation (CFC)	X	X	X		X
C—charity drive donation (NRS)	X	X	X	X	X
D—payments to dependents (note 4) (except X)	X	X	X	X	X
N—U.S. Government Life Insurance and/or National Service Life Insurance or repayment of loan on VA insurance (note 5)	X	X	X (1)	X	X
H—repayment of home loans	X	X	X	X	X
I—commercial life insurance (notes 2 & 3)	X	X	X	X	X
L—repayment of loans to Navy Relief Society & American Red Cross	X	X	X	X	X
M—Navy Mutual Aid Insurance	X	X		X	X
S—payment to financial institution for credit to allotter	X	X	X	X	X
E—contributions to Post-Vietnam Era Veterans Education Assistance Program	X	X			X
T—payment of indebtedness to U.S. or delinquent federal taxes	X	X	X	X	X
U—remittance to RSFPP for retired members on active duty	X	X			X

NOTES:

- (1) If electing to continue NSLI purchased before becoming an aviation cadet.
- (2) Allotter's life only, including family group type plans.
- (3) Comply with service regulations (SECNAVINST 1740.2 series) before new allotment may be issued for payment of premiums on commercial life insurance. However, any such allotments in effect Sept. 30, 1967, may be continued as an approved allotment.
- (4) A retired member may authorize allotments to a spouse, former spouse(s), and/or his or her child(ren) having a permanent residence other than member's own.
- (5) Payment of insurance premiums and repayment of insurance loans will be by one NSLI or class N allotment.

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II on board. On the inactive side, some 60,000 Selected Reservists are in the PASS system today, with the remainder of the inactive reserves to be programmed as PASS becomes fully automated.

The PASS Program Manager (OP-01B5/NMPC-08) provides policy guidance to the seven designated PASS major claimants (NAVCOMPT/CNO/CINCPACFLT/CINCLANTFLT/CINCUSNAVEUR/CNET/COMNAVRESFOR). These major claimants are responsible for PASS in the field. They provide the funding and material support for the operation of PASS by the PERSUPPACTs and their PERSUPPDET within assigned geographical areas.

Each PERSUPPDET is responsible for providing pay, personnel and Navy-sponsored transportation services for activities and individuals in an assigned geographical area. The PERSUPPDET performs for the customer command such functions as:

- Receipts/Transfers Processing
- Separations/Re-enlistments/Retirements Processing
- Personnel Accounting/Diary Preparation
- Issuing I.D. Cards/DEERS Eligibility Applications
- Updating records of Emergency Data/Service Group Life Insurance Changes
- Educational Services/Advancement Examinations
- Payday Processing/Supplemental Payments
- Transportation Management/Travel Processing
- Travel Claims Processing
- Passport/Visa Processing
- Pay and Service Record Maintenance
- Command Rosters/Management Reports
- Process TEMAC and Fleet Reserve Recall to Active Duty

Each customer command supported by the PERSUPPDET assigns a PASS liaison representative to serve as the com-

mand coordinator for pay, personnel and Navy-sponsored, transportation-related matters. Many of the administrative functions performed by the customer command require some processing through the PERSUPPDET and/or service and pay record entry such as:

- Leave Requests
- Enlisted Performance Evaluations
- Non-Judicial Punishments/Return of Naval Deserters
- Miscellaneous Pay and Service Record Entries for Naval Aircrewman Designation/Disqualification, Diver Designation, NEC assignments, Hazardous Duty assignments, etc.

In addition to PERSPAY and SDS, other automated systems have been instituted at various PERSUPPDETs to assist PASS in providing more timely and accurate accounting of pay, personnel and transportation functions. The majority of these are interim systems and will ultimately be incorporated into SDS:

• **Computer Aided Documentation Originated (CADO) System:** The CADO system was initially implemented to provide word processing support to the PERSUPPDETs. However, it has been enhanced to include a local data base and some ADP features to assist with pay processing.

• **Officer Assignment Information System (OASIS)/Enlisted Assignment Information System (EASIS):** These systems are being developed and implemented to automate the officer and enlisted distribution network and will standardize all officer and enlisted orders into one common format. The OASIS/EASIS systems will function as part of SDS and distribute permanent change of station orders directly to the PERSUPPDETs.

• **Standard Transfer Directive Module (STDM)/Availability Reporting and Tracking Module (ARTM):** These systems have enhanced the enlisted availability order-writing systems to assist in moving the student pipeline at training commands.

• **Direct Deposit System (DDS):** DDS has replaced the Pay Deposited Quicker (PDQ) system which allows a member's net pay to be electronically transferred from the Navy Finance Center, Cleveland, Ohio, to their designated financial institution. Unlike PDQ, DDS remains in effect when the member changes duty stations, including sea duty or overseas. This enables the individual to be paid continuously even while in a leave and travel status between duty stations.

• **Microcomputer Claims Processing System (MCPS):** This system has resulted in increased accuracy and faster processing of service members' travel claims.

• **Uniform Microcomputer Disbursing System (UMDS):** A set of computer programs built to aid PERSUPPDETs in the quick, easy computation of payrolls and reduce the day-to-day chores of maintaining Navy members' pay accounts and assist with payday processing.

• **Defense Enrollment Eligibility Reporting Systems (DEERS)/Real Time Automated Personnel Identification System (RAPIDS):** These systems were developed to assist in preventing fraud, waste and abuse. When fully implemented, they will provide computer-based means to maintain a central data base to be used in validating entitlements. The RAPIDS system will be used to issue identification cards and greatly increase control over those who receive them.

With PASS implementation Navywide supported by SDS/SDSA, it is expected that a system will be in place to support PERSPAY and provide improved "service to the customer".

REMINDER:

A limited number of additional copies of this article, and of each *All Hands* issue containing "Navy Rights & Benefits," are available from: Dept. of Navy, NMPC-05, PAO, Washington, D.C. 20370.



Photo by JO2 Lynn Jenkins

Interservice volleyball competition, in June All Hands



"Most of us, most of the time, live in blissful ignorance of what a small, elite, heroic group of Americans are doing for us night and day. As we speak, all over the globe, American sailors and submariners and aviators are doing something very dangerous. People say, 'Well, it can't be too dangerous because there are no wrecks.' But the reason we don't have more accidents is that these are superb professionals; the fact that they master the dangers does not mean that the dangers aren't real.

"Right now, somewhere around the world, young men are landing high-performance jet aircraft on the pitching decks of aircraft carriers—at night! You can't pay people to do that; they do it out of love of country, of adventure, of the challenge. We all benefit from it, and the very fact that we don't have to think about it tells you how superbly they're doing their job—living on the edge of danger so the rest of us need not think about, let alone experience, danger."

—George Will, commenting during the ABC news special coverage, on Jan. 28, 1986, of the space shuttle Challenger disaster.